



TECHNICAL EDUCATION
2009 Whirlpool 27' French Door IDI



Models:

GI7FVCXWA GI7FVCXWB GI7FVCXWQ GI7FVCXWY

JOB AID 8178777

FORWARD

This Job Aid, (Part No. 8178777), provides the technician with information on the installation, operation, and service of the Whirlpool 27' French Door Bottom-Mount Refrigerator. For specific information on the model being serviced, refer to the "Use and Care Guide," or "Tech Sheet" provided with the Whirlpool 27' French Door Bottom-Mount Refrigerator.

The Wiring Diagrams used in this Job Aid are typical and should be used for training purposes only. Always use the Wiring Diagram supplied with the product when servicing the refrigerator.

GOALS AND OBJECTIVES

The goal of this Job Aid is to provide information that will enable the service technician to properly diagnose malfunctions and repair the Whirlpool 27' French Door Bottom-Mount Refrigerator.

The objectives of this Job Aid are to:

- Understand and follow proper safety precautions.
- Successfully troubleshoot and diagnose malfunctions.
- Successfully perform necessary repairs.
- Successfully return the refrigerator to its proper operational status.

WHIRLPOOL CORPORATION assumes no responsibility for any repairs made on our products by anyone other than Authorized Service Technicians.

TABLE OF CONTENTS

Page

GENERAL	1-1
Refrigerator Safety	1-1
Whirlpool Model And Serial Number Designations	1-2
Model And Serial Number Label And Tech Sheet Locations	1-3
Specifications	1-4
Whirlpool Corporation Major Appliance Warranty	1-5
INSTALLATION REQUIREMENTS	2-1
Installation Instructions	2-1
PRODUCT OPERATION	3-1
Main Control Board	3-1
Refrigeration System Flow	3-2
Machine Compartment Air Flow	3-3
Cabinet Air Flow	3-4
Cabinet Water Flow	3-5
Ice Compartment And Freezer Fan Operation	3-6
Accessing Dispenser Switches	3-7
Using The Control Display	3-8
COMPONENT ACCESS	4-1
Component Locations	4-1
Removing The Facade	4-2
Removing The Ice Maker Assembly	4-4
Removing The Heat Shield And Thermal Fuse	4-7
Removing The Ice Maker LED	4-8
Accessing The Water Valve And Reservoir	4-9
Removing The Water Valve	4-11
Removing The Test Switch	4-13
Accessing The Motorized Air Damper	4-14
Accessing The Machine Compartment	4-15
Removing The Compressor	4-16
Accessing The Electronic Boards	4-17
Removing The Drain Tube	4-18
Leveling Legs	4-19
Dropping The Machine Compartment Pan	4-20
Removing Left Roller	4-21
Removing The Evaporation Pan	4-22
Removing The Condenser Fan Assembly	4-23
Disassembling The Dispenser	4-24
Accessing The Door Hinges And Water Tubes	4-29
Preparation For Left Door Removal	4-30
Removing The Ice Maker Fill Tube	4-31

TABLE OF CONTENTS (continued)

COMPONENT TESTING	5-1
For Service Technician's Use Only	5-1
Component Specifications	5-2
DIAGNOSTICS AND TROUBLESHOOTING	6-1
Diagnostic Tests	6-1
Troubleshooting	6-3
WIRING DIAGRAMS	7-1
Main Control Board	7-2
Main Control Board Connector Identification	7-3

GENERAL

REFRIGERATOR SAFETY

Your safety and the safety of others is very important.

We have provided many important safety messages in this Job Aid and on the appliance. Always read and obey all safety messages.



This is the safety alert symbol.

This symbol alerts you to hazards that can kill or hurt you and others.

All safety messages will follow the safety alert symbol and either the word “DANGER” or “WARNING.” These words mean:

! DANGER

You can be killed or seriously injured if you don't immediately follow instructions.

! WARNING

You can be killed or seriously injured if you don't follow instructions.

All safety messages will tell you what the potential hazard is, tell you how to reduce the chance of injury, and tell you what can happen if the instructions are not followed.

WHIRLPOOL MODEL & SERIAL NUMBER DESIGNATIONS

MODEL NUMBER

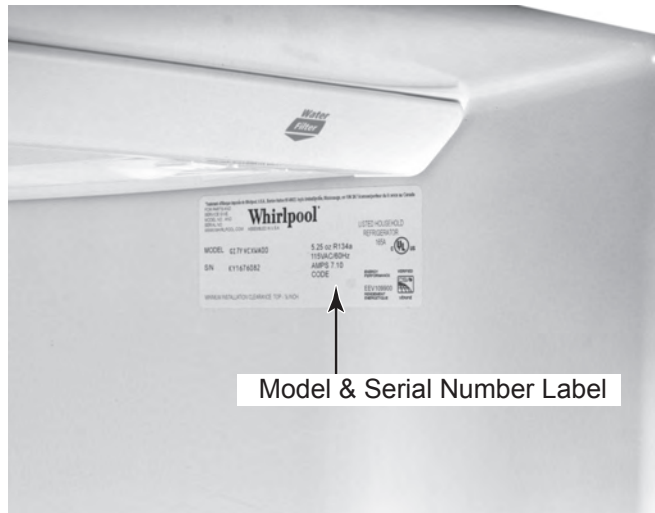
MODEL NUMBER	G	I	7	F	V	C	X	W	A
PRODUCT GROUP G = WHIRLPOOL									
PRODUCT IDENTIFICATION I = EXTERNAL ICE & WATER									
CAPACITY 7 = 27 CU. FT.									
MODEL/SERIES F = RETAIL									
MODEL FEATURE VARIANTS V = SPECIAL VARIATION									
MODEL FEATURE CODE C = IN DOOR ICE DISPENSER									
DOOR SWING X = FRENCH DOOR									
YEAR OF INTRODUCTION W = 2009									
COLOR CODE A = SATINA ON MONO CABINET B = BLACK Q = WHITE Y = SS ON MONO CABINET									

SERIAL NUMBER

SERIAL NUMBER	K	Y	16	1	2	3	4	5
MANUFACTURING RESPONSIBILITY K = AMANA								
YEAR OF PRODUCTION Y = 2009								
WEEK OF PRODUCTION 16th = WEEK								
PRODUCT SEQUENCE NUMBER								

MODEL & SERIAL NUMBER LABEL & TECH SHEET LOCATIONS

The Model & Serial Number label location is shown below.



The Tech Sheet location is shown below.



SPECIFICATIONS

Component	Specifications all parts 115VAC/60HZ unless noted
Compressor	VEGZ7H
	BTUH..... Variable
	Watt..... 60 Hz / 113 watts
	Current Lock rotor..... 3.3 amps± 15%
	Current Full load..... 3.3 amps± 15%
	Resistance Run windings..... 6.4 ohms± 15%
	Resistance Start windings..... 6.4 ohms± 15%
	Inverter..... 3-6 VDC, Red / White =120 VAC
Electric damper control	Maximum closing time..... 16 seconds
	Temperature Rating..... 20°F- 110°F
	RPM..... 4.2
Thermistor	Temperature..... Resistance
	77°F..... 2700 ohms± 1.8%
	36°F..... 7964 ohms± 1.0%
	0°F..... 23345 ohms± 1.8%
Condenser motor	Rotation (facing end opposite shaft)..... Clockwise
	RPM..... 1090 RPM
	Watt..... 3.4 watts±15%@115VAC
	Current..... 0.085 amps± 15%@115VAC
Evaporator fan motor	Rotation (facing end opposite shaft)..... Clockwise
	RPM..... 3000 RPM
	Watt..... 5.5 ±15% watts@12 VDC
	Note: Fan blade must be fully seated on shaft to achieve proper airflow.
Thermostat (Defrost)	Volt..... 120/240 VAC
	Watt..... 495 watts
	Current..... 5.8/3.75 amps
	Resistance across terminals:
	Above 32°F ±5°..... Open
	Below 17°F ±7°..... Closed
Evaporator heater	Volt..... 115 VAC
	Wattage..... 470 ±5% watts @ 115VAC
	Resistance..... 29.0 ±5% ohms
Control board	Volt..... 120VAC, 60 HZ
Dual Water Valve	Watts..... Blue side 20w, Yellow side 20w
Smart Valve (Isolation)	Watts..... 20w
Ice Box Fan	Rotation (facing end opposite shaft)..... Clockwise
	RPM..... 3000 RPM
	Watt..... 5.5 ±15% watts@12 VDC
Light switch	Type..... SPST NC
	Volt..... 125/250 VAC
	Current..... 8/4 amps

WHIRLPOOL CORPORATION MAJOR APPLIANCE WARRANTY

LIMITED WARRANTY

For one year from the date of purchase, when this major appliance is operated and maintained according to instructions attached to or furnished with the product, Whirlpool Corporation or Whirlpool Canada LP (hereafter "Whirlpool") will pay for Factory Specified Parts and repair labor to correct defects in materials or workmanship that existed when this major appliance was purchased. Service must be provided by a Whirlpool designated service company. **YOUR SOLE AND EXCLUSIVE REMEDY UNDER THIS LIMITED WARRANTY SHALL BE PRODUCT REPAIR AS PROVIDED HEREIN.** This limited warranty is valid only in the United States or Canada and applies only when the major appliance is used in the country in which it was purchased. Proof of original purchase date is required to obtain service under this limited warranty.

ITEMS EXCLUDED FROM WARRANTY

This limited warranty does not cover:

1. Replacement parts or repair labor if this major appliance is used for other than normal, single-family household use or when it is used in a manner that is inconsistent to published user or operator instructions and/or installation instructions.
2. Service calls to correct the installation of your major appliance, to instruct you on how to use your major appliance, to replace or repair house fuses, or to correct house wiring or plumbing.
3. Service calls to repair or replace appliance light bulbs, air filters or water filters. Consumable parts are excluded from warranty coverage.
4. Damage resulting from accident, alteration, misuse, abuse, fire, flood, acts of God, improper installation, installation not in accordance with electrical or plumbing codes, or use of products not approved by Whirlpool.
5. Cosmetic damage, including scratches, dents, chips or other damage to the finish of your major appliance, unless such damage results from defects in materials or workmanship and is reported to Whirlpool within 30 days from the date of purchase.
6. Any food or medicine loss due to refrigerator or freezer product failures.
7. Pickup and delivery. This major appliance is intended to be repaired in your home.
8. Repairs to parts or systems resulting from unauthorized modifications made to the appliance.
9. Expenses for travel and transportation for product service if your major appliance is located in a remote area where service by an authorized Whirlpool servicer is not available.
10. The removal and reinstallation of your major appliance if it is installed in an inaccessible location or is not installed in accordance with Whirlpool's published installation instructions.
11. Replacement parts or repair labor on major appliances with original model/serial numbers that have been removed, altered or cannot be easily determined.
12. Discoloration, rust, or oxidation of stainless steel surfaces.

DISCLAIMER OF IMPLIED WARRANTIES

IMPLIED WARRANTIES, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED TO ONE YEAR OR THE SHORTEST PERIOD ALLOWED BY LAW. Some states and provinces do not allow limitations on the duration of implied warranties of merchantability or fitness, so this limitation may not apply to you. This warranty gives you specific legal rights, and you also may have other rights that vary from state to state or province to province.

LIMITATION OF REMEDIES; EXCLUSION OF INCIDENTAL AND CONSEQUENTIAL DAMAGES

YOUR SOLE AND EXCLUSIVE REMEDY UNDER THIS LIMITED WARRANTY SHALL BE PRODUCT REPAIR AS PROVIDED HEREIN. WHIRLPOOL SHALL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES. Some states and provinces do not allow the exclusion or limitation of incidental or consequential damages, so these limitations and exclusions may not apply to you. This warranty gives you specific legal rights, and you also may have other rights that vary from state to state or province to province.

If outside the 50 United States and Canada, contact your authorized Whirlpool dealer to determine if another warranty applies.

6/08

For additional product information, in the U.S.A., visit www.whirlpool.com

In Canada, visit www.whirlpool.ca

If you do not have access to the Internet and you need assistance using your product or you would like to schedule service, you may contact Whirlpool at the number below.

Have your complete model number ready. You can find your model number and serial number on the label, located on the inside wall of the refrigerator compartment.

For assistance or service in the U.S.A., call 1-800-253-1301. In Canada, call 1-800-807-6777.

If you need further assistance, you can write to Whirlpool with any questions or concerns at the address below:

In the U.S.A.:

Whirlpool Brand Home Appliances
Customer eXperience Center
553 Benson Road
Benton Harbor, MI 49022-2692

In Canada:

Whirlpool Brand Home Appliances
Customer eXperience Centre
1901 Minnesota Court
Mississauga, Ontario L5N 3A7

Please include a daytime phone number in your correspondence.

Please keep these User Instructions and the model number information for future reference.

— NOTES —

INSTALLATION REQUIREMENTS

INSTALLATION INSTRUCTIONS

LOCATION REQUIREMENTS

⚠ WARNING

Excessive Weight Hazard

Use two or more people to move and install refrigerator.

Failure to do so can result in back or other injury.

⚠ WARNING



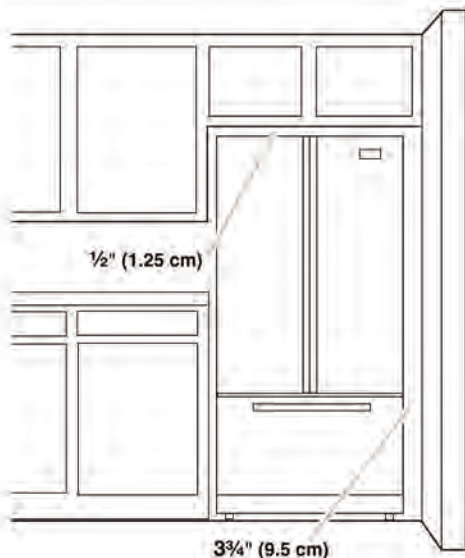
Explosion Hazard

Keep flammable materials and vapors, such as gasoline, away from refrigerator.

Failure to do so can result in death, explosion, or fire.

To ensure proper ventilation for your refrigerator, allow for a ½" (1.25 cm) space at the top and behind the refrigerator. If your refrigerator has an ice maker, allow extra space at the back for the water line connections. When installing your refrigerator next to a fixed wall, leave a 3¾" (9.5 cm) minimum space between the refrigerator and wall to allow the door to swing open.

NOTE: It is recommended that you do not install the refrigerator near an oven, radiator, or other heat source. Do not install the refrigerator in a location where the temperature will fall below 55°F (13°C).



ELECTRICAL REQUIREMENTS

⚠ WARNING



Electrical Shock Hazard

Plug into a grounded 3 prong outlet.

Do not remove ground prong.

Do not use an adapter.

Do not use an extension cord.

Failure to follow these instructions can result in death, fire, or electrical shock.

Before you move your refrigerator into its final location, it is important to make sure you have the proper electrical connection.

Recommended Grounding Method

A 115 Volt, 60 Hz., AC only 15- or 20-amp fused, grounded electrical supply is required. It is recommended that a separate circuit serving only your refrigerator be provided. Use an outlet that cannot be turned off by a switch. Do not use an extension cord.

NOTE: Before performing any type of installation, cleaning, or removing a light bulb, turn Cooling OFF, and then disconnect the refrigerator from the electrical source. When you are finished, reconnect the refrigerator to the electrical source and turn Cooling ON. See "Using the Controls."

WATER SUPPLY REQUIREMENTS

Gather the required tools and parts before starting installation. Read and follow the instructions provided with any tools listed here.

TOOLS NEEDED:

- Flat-blade screwdriver
- 1/4" Nut driver
- 7/16" and 1/2" Open-end or two adjustable wrenches
- 1/4" Drill bit
- Cordless drill

IMPORTANT:

- All installations must meet local plumbing code requirements.
- Do not use a piercing-type or 3/16" (4.76 mm) saddle valve which reduces water flow and clogs more easily.
- Use copper tubing and check for leaks. Install copper tubing only in areas where the household temperatures will remain above freezing.
- For models with water filters, the disposable water filter should be replaced at least every 6 months.

Water Pressure

A cold water supply with water pressure of between 35 and 120 psi (241 and 827 kPa) is required to operate the water dispenser and ice maker. If you have questions about your water pressure, call a licensed, qualified plumber.

Reverse Osmosis Water Supply

IMPORTANT: The pressure of the water supply coming out of a reverse osmosis system going to the water inlet valve of the refrigerator needs to be between 35 and 120 psi (241 and 827 kPa).

If a reverse osmosis water filtration system is connected to your cold water supply, the water pressure to the reverse osmosis system needs to be a minimum of 40 to 60 psi (276 to 414 kPa).

If the water pressure to the reverse osmosis system is less than 40 to 60 psi (276 to 414 kPa):

- Check to see whether the sediment filter in the reverse osmosis system is blocked. Replace the filter if necessary.
- Allow the storage tank on the reverse osmosis system to refill after heavy usage.
- If your refrigerator has a water filter, it may further reduce the water pressure when used in conjunction with a reverse osmosis system. Remove the water filter. See "Water Filtration System."

If you have questions about your water pressure, call a licensed, qualified plumber.

CONNECT THE WATER SUPPLY

Read all directions before you begin.

IMPORTANT: If you turn the refrigerator on before the water line is connected, turn the ice maker OFF.

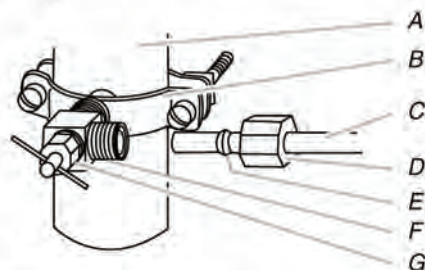
Connect to Water Line

1. Unplug refrigerator or disconnect power.
2. Turn OFF main water supply. Turn ON nearest faucet long enough to clear line of water.
3. Locate a 1/2" to 1 1/4" (12.7 mm to 31.8 mm) vertical cold water pipe near the refrigerator.

IMPORTANT:

- Make sure it is a cold water pipe.
- Horizontal pipe will work, but drill on the top side of the pipe, not the bottom. This will help keep water away from the drill and normal sediment from collecting in the valve.

4. Determine the length of copper tubing you need. Measure from the connection on the rear of the refrigerator to the water pipe. Add 7 ft (2.1 m) to allow for cleaning. Use 1/4" (6.35 mm) O.D. (outside diameter) copper tubing. Be sure both ends of copper tubing are cut square.
5. Using a cordless drill, drill a 1/4" hole in the cold water pipe you have selected.

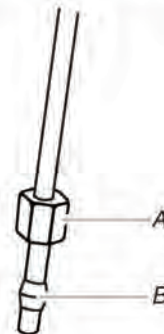


- | | |
|--------------------|-----------------------|
| A. Cold water pipe | E. Compression sleeve |
| B. Pipe clamp | F. Shutoff valve |
| C. Copper tubing | G. Packing nut |
| D. Compression nut | |

6. Fasten the shutoff valve to the cold water pipe with the pipe clamp. Be sure the outlet end is solidly in the 1/4" drilled hole in the water pipe and that the washer is under the pipe clamp. Tighten the packing nut. Tighten the pipe clamp screws slowly and evenly so washer makes a watertight seal. Do not overtighten.
7. Slip the compression sleeve and compression nut on the copper tubing as shown. Insert the end of the tubing into the outlet end squarely as far as it will go. Screw compression nut onto outlet end with adjustable wrench. Do not overtighten.
8. Place the free end of the tubing in a container or sink, and turn ON the main water supply. Flush the tubing until water is clear. Turn OFF the shutoff valve on the water pipe. Coil the copper tubing.

Connect to Refrigerator

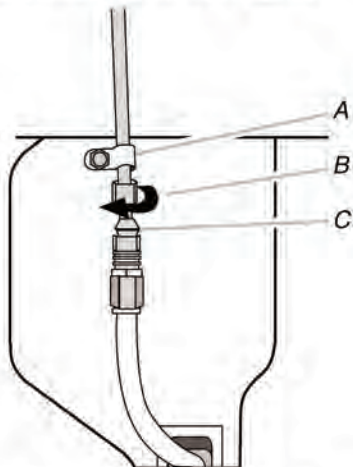
1. Remove plastic cap from water supply connection. Place brass nut and compression sleeve on copper tube end as shown.



- A. Brass nut
B. Compression sleeve

2. Place end of copper tubing into plastic water valve supply line. Slide the brass nut over the sleeve and screw the nut into supply line.
3. Using an adjustable wrench, hold the nut on the plastic water line to keep it from moving. Then, with a second wrench turn the nut on the copper tubing counterclockwise to completely tighten. Do not overtighten.
4. Check connection by pulling on the copper tubing.

5. Attach the copper tubing to the refrigerator with a "P" clamp. Slide the plastic water line into the retainer.



A. "P" Clamp
B. Brass nut
C. Compression sleeve

6. Turn on water supply to refrigerator and check for leaks. Correct any leaks.

Complete the Installation

⚠ WARNING



Electrical Shock Hazard

Plug into a grounded 3 prong outlet.

Do not remove ground prong.

Do not use an adapter.

Do not use an extension cord.

Failure to follow these instructions can result in death, fire, or electrical shock.

1. Plug into a grounded 3 prong outlet.
2. Flush the water system. See "Water and Ice Dispenser."

NOTE: Allow 24 hours to produce the first batch of ice. Discard the first three batches of ice produced. Allow 3 days to completely fill the ice container.

REFRIGERATOR DOORS AND DRAWER

All graphics referenced in the following instructions are included later in this section after "Final Steps."

Remove and Replace Handles

To Remove Handles:

1. Grasp the lower part of the handle firmly, slide the handle up and pull the handle straight out from the door. See Plastic Handle graphics 1 and 2.

To Replace Handles:

1. Position the handle so that the large holes in the mounting clips are down and align the holes with the door studs.
2. Rotate the handle so that the mounting clips are flat against the door and slide the handle down to engage. See Plastic Handle graphics 1 and 2.

Remove Doors and Hinges

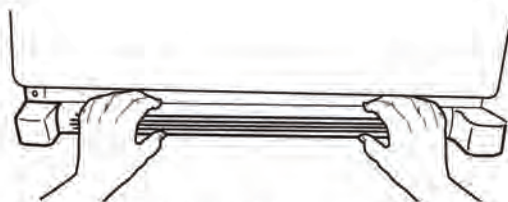
IMPORTANT:

- Remove food and any adjustable door or utility bins from doors.
- Keep the refrigerator doors closed until you are ready to lift them free from the cabinet.

NOTE: Provide additional support for the refrigerator door while the hinges are being removed. Do not depend on the door gasket magnets to hold the door in place while you are working.

TOOLS NEEDED: $\frac{5}{16}$ ", $\frac{3}{8}$ ", $\frac{1}{4}$ " hex-head socket wrench, #2 Phillips screwdriver, and a flat-blade screwdriver.

1. Unplug refrigerator or disconnect power.
2. Remove the base grille. Grasp the grille firmly and pull it toward you.



3. Starting with the right-hand side door, remove the parts for the top hinge as shown in Top Hinge graphic. Lift the refrigerator door from the bottom hinge pin.
4. Remove the hinge pin cover from the bottom hinge pin and keep it for later use. See Bottom Hinge graphic.
5. Remove top hinge cover from left side refrigerator door.
6. Remove the façade from the front of the top of the cabinet. Remove the screw on the backside of the center of the façade, then slide the façade forward and out from under the hinge.
7. Disconnect the wiring plug located on top of the hinge by wedging a flat-blade screwdriver or your fingernail between the two sections.
8. Disconnect the water line by pulling back on the locking collar while pulling the water line out of the water line connector.
9. Remove the parts for the top hinge as shown in Top Hinge graphic. Lift the left-hand side door from the bottom hinge pin.

NOTE: On some models, remove the hinge pin cover from the bottom hinge pin and keep it for later use. See Bottom Hinge graphic.
10. Using a $\frac{3}{8}$ " hex wrench, remove the leveling leg brackets from the bottom of the cabinet. Keep screws for later use.

Replace Doors and Hinges

1. Assemble the parts for the top hinges as shown in Top Hinge graphic. Do not tighten the screws completely.
2. Replace the parts for the bottom hinge as shown in Bottom Hinge graphic. Tighten screws. Replace the refrigerator door.
NOTE: Provide additional support for the refrigerator door while the hinges are being moved. Do not depend on the door gasket magnets to hold the door in place while you are working.
3. Align the door so that the bottom of the refrigerator door aligns evenly with the top of the freezer drawer. Tighten all screws.
4. Reconnect the wiring plug on top of the left-hand side refrigerator door.
5. Reconnect the water line by pulling back the locking collar ring while firmly pushing the water line into the connector.
6. Check for leaks. Replace the façade and top hinge covers.

Remove and Replace Freezer Drawer

IMPORTANT: Two people may be required to remove and replace the freezer drawer. Graphics are included later in this section.

Remove Drawer Front

1. Open the freezer drawer to full extension.
2. Loosen the four screws attaching the drawer glides to the drawer front. See Drawer Front Removal graphic.
NOTE: Loosen screws three to four turns. Keep the screws in the drawer front.
3. Lift drawer front upward and off the screws. See Drawer Front Removal graphic.

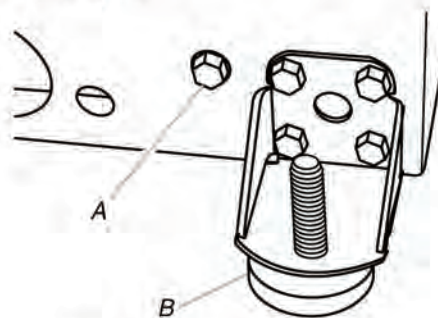
Replace Drawer Front

1. Slide the drawer glides out of the freezer compartment. Insert the screws in the top of the drawer front into the slots in the drawer brackets. See Drawer Front Replacement graphic.
2. Pull the drawer brackets toward you to position the two screws in the bottom of the drawer front into the brackets. See Drawer Front Replacement graphic.
3. Completely tighten the four screws.

Adjust the Doors

1. If your refrigerator seems unsteady or you want the door to close more easily, raise or lower the cabinet. Using a $\frac{3}{8}$ " hex driver, turn the roller adjustment screw(s) on each side to raise or lower that side of the refrigerator.
NOTE: Having someone push against the top of the refrigerator takes some weight off the adjustment screws and rollers. This makes it easier to turn the screws. It may take several turns of the roller adjustment screw to adjust the tilt of the refrigerator.
 - To raise, turn the roller adjustment screw to the right.
 - To lower, turn the roller adjustment screw to the left.

2. Turn the brake foot clockwise until it is firmly against the floor to keep the refrigerator from rolling forward when the freezer drawer is pulled open.



A. Front roller adjustment screw
B. Brake foot

3. Open the door again to make sure that it closes as easily as you like. If not, tilt the refrigerator slightly more to the rear by turning both leveling screws clockwise. It may take several more turns, and you should turn both screws the same amount.

Final Steps

1. Replace the base grille.

⚠ WARNING



Electrical Shock Hazard

Plug into a grounded 3 prong outlet.

Do not remove ground prong.

Do not use an adapter.

Do not use an extension cord.

Failure to follow these instructions can result in death, fire, or electrical shock.

2. Plug into a grounded 3 prong outlet.
3. Return all removable parts to doors and drawer and food to refrigerator and freezer.



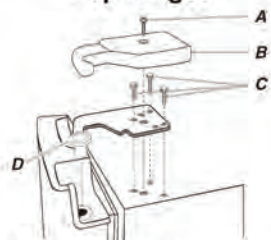
⚠️ WARNING

Electrical Shock Hazard

Disconnect power before removing doors.
Failure to do so can result in death or electrical shock.

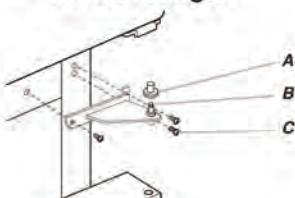
Door Removal & Replacement

Top Hinges



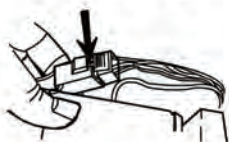
- A. Hinge Cover Screw
- B. Top Hinge Cover
- C. $\frac{5}{16}$ " Hex-Head Hinge Screws
- D. Top Hinge

Bottom Hinges

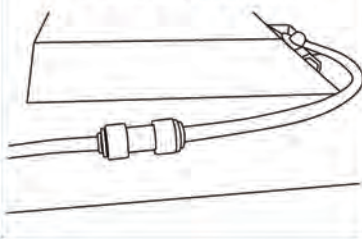


- A. Hinge Pin Cover
- B. Bottom Hinge
- C. Hinge Screws

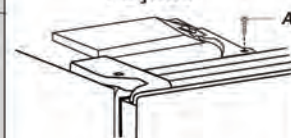
Wiring Plug



Water Connection

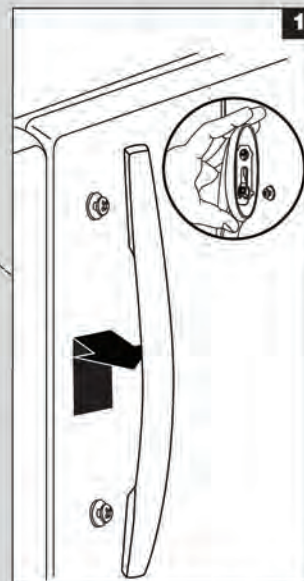


Façade

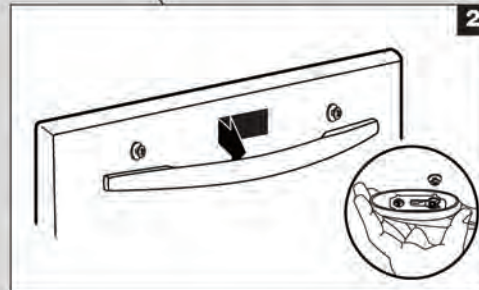


A. Screw

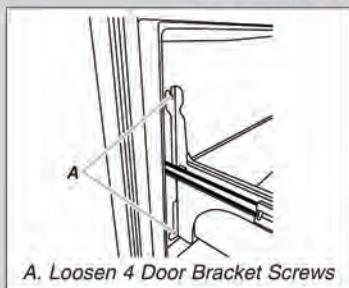
1



2



Drawer Front Removal



A. Loosen 4 Door Bracket Screws



Drawer Front Replacement

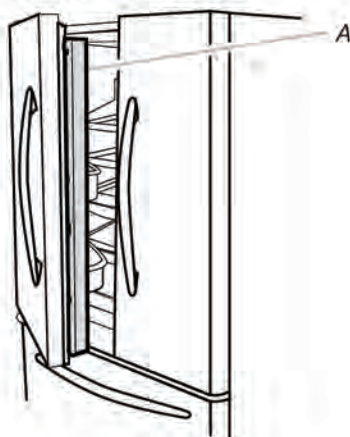
REFRIGERATOR USE

OPENING AND CLOSING DOORS

There are two refrigerator compartment doors. The doors can be opened and closed either separately or together.

There is a vertically-hinged seal on the left refrigerator door.

- When the left side door is opened, the hinged seal automatically folds inward so that it is out of the way.
- When both doors are closed, the hinged seal automatically forms a seal between the two doors.



A. Hinged seal

Using the Controls

The refrigerator and freezer controls are located on the dispenser panel and display screen.



A. Display screen

Language Selection

The language of the text on the display screen can be set to English, Spanish or French.

- To change the display screen text from English to Spanish or French, press the HOME button on the dispenser panel. On the display screen, press OPTIONS, then PREFERENCIAS, then LANGUAGE. Select ESPAÑOL (Spanish) or FRANÇAIS (French), wait 15 seconds or press BACK, and the screen text will be changed.
- To change the display screen text from Spanish to English, press the HOME button on the dispenser panel. On the display screen, press OPCIONES, then PREFERENCIAS, then IDIOMA. Select INGLÉS, wait 15 seconds or press ATRÁS, and the screen text will be changed.
- To change the display screen text from French to English, press the HOME button on the dispenser panel. On the display screen, press OPTIONS, then PRÉFÉRENCES, then LANGUE. Select ANGLAIS, wait 15 seconds or press RETOUR, and the screen text will be changed.

Cooling On/Off

To turn cooling off, press and hold the TEMP button on the dispenser panel for 3 seconds. Your refrigerator and freezer will not cool when cooling is off.

To turn cooling back on, press and hold the TEMP button for 3 seconds again.

Temperature Controls

For your convenience, your refrigerator and freezer controls are preset at the factory. When you first install your refrigerator, make sure that the controls are still set to the "mid-settings."

To view set points, press the TEMP button on the dispenser panel. The factory recommended set points are 0°F (-18°C) for the freezer and 38°F (3°C) for the refrigerator.

IMPORTANT:

- Wait 24 hours before you put food into the refrigerator. If you add food before the refrigerator has cooled completely, your food may spoil.

NOTE: Adjusting the set points to a higher (colder) than recommended setting will not cool the compartments any faster.

- If the temperature is too warm or too cold in the refrigerator or freezer, first check the air vents to be sure they are not blocked before adjusting the controls.
- The preset settings should be correct for normal household usage. The controls are set correctly when milk or juice is as cold as you like and when ice cream is firm.
- Wait at least 24 hours between adjustments. Recheck the temperatures before other adjustments are made.
- The display screen on the dispenser control panel has a backlight, which will turn off automatically when the controls have not been used for 2 minutes or more. When the backlight is off, the first press of a control button or the display screen will only reactivate the backlight, without changing any settings. Within 2 minutes after the backlight has been reactivated, additional presses of control buttons or the display screen will change the applicable settings.

Adjusting the Controls

To adjust the set points, press the TEMP button on the dispenser panel. Set points and adjusting information will appear on the display screen.

Refrigerator Controls

Make sure REFRIGERATOR is selected. The up and down arrows on the display screen allow you to adjust the refrigerator compartment temperature. The set point range for the refrigerator is 33°F to 45°F (0°C to 7°C).

- Press the down arrow to lower the set point.
- Press the up arrow to raise the set point.

NOTE: To view Celsius temperatures, press UNITS. To return the display setting to Fahrenheit, press UNITS again.

Freezer Controls

Make sure FREEZER is selected. The up and down arrows on the display screen allow you to adjust the freezer compartment temperature. The set point range for the freezer is -5°F to 5°F (-21°C to -15°C).

- Press the down arrow to lower the set point.
- Press the up arrow to raise the set point.

NOTE: To view Celsius temperatures, press UNITS. To return the display setting to Fahrenheit, press UNITS again.

CONDITION:	TEMPERATURE ADJUSTMENT:
REFRIGERATOR too cold	REFRIGERATOR Setting 1° higher
REFRIGERATOR too warm	REFRIGERATOR Setting 1° lower
FREEZER too cold	FREEZER Setting 1° higher
FREEZER too warm/too little ice	FREEZER Setting 1° lower

Press BACK to exit adjust mode.

Additional Features

Fast Cool

The Fast Cool feature assists with periods of heavy ice usage, full grocery loads, or temporarily warm room temperatures.

On the display screen, press OPTIONS, then FAST COOL. The display screen indicates whether the feature is on or off. Press the FAST COOL icon to toggle between settings.

Once activated, the Fast Cool setting will remain on for 24 hours unless manually turned off. The display will continue to show your normal temperature set points.

NOTE: If increased ice production is desired at all times, change the freezer control to a lower setting. Setting the freezer to a colder temperature may make some foods, such as ice cream, harder.

Kitchen Timer

To assist with general kitchen activities, the controls include a timer feature.

1. On the display screen, press OPTIONS, then TIMER.
2. Use the up and down arrows to adjust the hours and minutes as desired.
3. To start the timer countdown, press START. The timer will not initiate if you exit the timer screen without pressing START.
 - When the timer is counting down, press PAUSE to pause the countdown. Press START again to restart the countdown.
 - To reset the timer to zero, press RESET at any time.
 - Press MAXIMIZE to increase the size of the countdown on the display screen. When the countdown reaches zero, the display will return to the previous screen.

IMPORTANT: When using the timer, you can also use other control and dispenser features. Press the HOME button on the dispenser panel. The timer countdown will be shown at the top of the display screen.

4. When the countdown reaches zero, the timer clock will blink and a tone will sound, repeating every 30 seconds. Press RESET to turn off the tone and reset the timer feature.

Door Ajar Alarm

The Door Ajar Alarm feature sounds an alarm when the refrigerator or freezer door is open for 5 minutes and the product cooling is turned on. The alarm will repeat every 2 minutes.

- Close both doors to turn it off. The feature then resets and will reactivate when either door is left open again for 5 minutes.
- If you need to keep the doors open and wish to silence the alarm for up to 5 minutes, press SNOOZE on the display screen.

- If you need to keep the doors open and wish to silence the alarm for longer than 5 minutes, press RESET on the display screen. The alarm will remain off until both doors are closed, then will reactivate when either door is left open again for 5 minutes.

Additional Settings

Time and Date

- To change the time and date displayed, press OPTIONS, then SETTINGS, then TIME & DATE.

To change the time, use the up and down arrows.

To change the date, press CHANGE DATE, then use the arrows to adjust the setting as desired.

Sound Volume

- To adjust the volume of all dispenser and control sounds, press OPTIONS, then SETTINGS, then VOLUME. Select the desired volume, then wait 15 seconds or press BACK.

NOTE: Selecting MUTE will not disable the Door Ajar Alarm.

Screen Brightness

- To adjust the brightness of the display screen, press OPTIONS, then SETTINGS, then BRIGHTNESS. Select the desired brightness, then wait 15 seconds or press BACK.

Factory Reset

- To reset all system settings and preferences to the factory defaults, press OPTIONS, then SETTINGS, then FACTORY RESET. On the next screen, press YES to confirm. If you unintentionally press YES instead of NO, you will have 3 seconds to press CANCEL and retain your custom settings.

IMPORTANT: When choosing to return to the default settings, all customized preferences will be lost - including temperature set points, dispensing preferences and presets, language selection, volume and brightness settings, and time and date.

Touch Screen Care

IMPORTANT: Do not use sharp objects when using the touch screen. Doing so could damage the screen.

For information about cleaning the touch screen, see "Cleaning."

CRISPER HUMIDITY CONTROL

You can control the amount of humidity in the moisture-sealed crisper. Depending on your model, adjust the control to any setting between FRUIT and VEGETABLES or LOW and HIGH.

FRUIT / LOW (open) for best storage of fruits and vegetables with skins.

VEGETABLES / HIGH (closed) for best storage of fresh, leafy vegetables.

WATER AND ICE DISPENSER

(on some models)

Depending on your model, you may have one or more of the following options: the ability to select crushed or cubed ice; a rotating water dispenser faucet and pull-out tray; a special light that turns on when you use the dispenser; a lock option to avoid unintentional dispensing; or an indicator that tells you when there has been a power outage.

IMPORTANT: The language of the text on the display screen can be set to English, Spanish or French. For information about changing the language, see "Using the Controls."

NOTES:

- The dispensing system will not operate when the refrigerator door is open.

- After connecting the refrigerator to a water source, flush the water system. Use a sturdy container to depress and hold the water dispenser pad for 5 seconds, then release it for 5 seconds. Repeat until water begins to flow. Once water begins to flow, continue depressing and releasing the dispenser pad (5 seconds on, 5 seconds off) for an additional 5 minutes. This will flush air from the filter and water dispensing system. Additional flushing may be required in some households. As air is cleared from the system, water may spurt out of the dispenser.
- Allow 24 hours for the refrigerator to cool down and chill water.
- Allow 24 hours to produce the first batch of ice. Discard the first three batches of ice produced.
- The display screen on the dispenser control panel has a backlight, which will turn off automatically when the controls have not been used for 2 minutes or more. When the backlight is off, the first press of a control button or the display screen will only reactivate the backlight, without changing any settings. Within 2 minutes after the backlight has been reactivated, additional presses of control buttons or the display screen will change the applicable settings.

The Water Dispenser

IMPORTANT: Dispense enough water every week to maintain a fresh supply.

The default display unit for water dispensing is ounces. The units can be changed to cups or liters.

To Dispense Water (Standard):

1. Press a sturdy glass against the water dispenser pad OR place the glass below the water dispenser and press the water dispenser button.



2. Remove the glass OR release the button to stop dispensing.

To Dispense Water (Measured Fill):

Measured Fill allows you to dispense a specified amount of water with the touch of a few buttons.

NOTE: The amount of water you select will be dispensed. Be sure that the container is empty and can hold the entire volume. If ice is in the container, you may need to adjust your selection.

1. Press WATER on the display screen to turn the feature on.

NOTE: The dispenser will automatically exit the Measured Fill screen after 15 seconds of inactivity.

2. You can dispense water by the ounce, cup, or liter. Press UNITS to select your desired setting. Minimum and maximum volumes are listed below.

Units	Minimum	Maximum
Ounces	1	128
Cups	1/4	16
Liters	0.05	4

3. Press the up and down arrows to adjust the volume as desired.

NOTE: Most coffee cups (commonly 4 to 6 oz [118 to 177 mL] per cup) are not the same size as a measuring cup (8 oz [237 mL]). You may need to adjust the volume to avoid unintentionally overfilling coffee cups.

4. To dispense water, press a sturdy glass against the water dispenser pad OR place the glass below the water dispenser and press the water dispenser button.



NOTE: While dispensing water, the digital display will count down how much water remains to be dispensed, according to the volume you selected. The flow of water will automatically stop once the desired volume has been dispensed.

5. To stop dispensing before the selected volume has been dispensed, remove the glass from the dispenser pad OR press the water dispenser button a second time.

NOTE: If you stop dispensing before the desired volume has been dispensed, the digital display will continue to show how much water remains to be dispensed. The display will exit the Measured Fill screen after 15 seconds of inactivity.

To select a new volume or select the same volume again, you must first finish dispensing the selected volume, or turn off the Measured Fill feature and then turn it back on.

Preset Volumes

The dispenser can store up to three preset water volumes, for easy dispensing into commonly used containers.

- To store presets, press WATER, then PRESET. Locate a blank or unwanted preset on the display screen. Press and hold that preset for 3 seconds, and the preset adjustment menu will appear on the display screen. Adjust the units and volume of water as desired, as instructed in steps 2 and 3 of the previous section. Press PRESET to save the preset.
- To use presets, press WATER, then PRESET, then press and release the desired preset. Dispense water as instructed in steps 4 and 5 of the previous section.

Rotating Faucet and Pull-out Tray (on some models)

Your dispenser may include a rotating water faucet and a small pull-out tray at the bottom of the dispenser.



A. Faucet rotated
B. Pull-out tray

- The faucet rotates to the center to allow for easy dispensing into large containers. To rotate it, push in on the right-hand side of the faucet as shown.



Push in on the left-hand side to rotate the faucet back into place.

NOTE: When using the dispenser with the faucet rotated, do not use the water dispenser pad. Only use the water dispenser button to dispense. Dispensing by pressing the container against the water dispenser pad may result in unintentional spilling.

- The tray can be pulled out a bit in order to better support large containers. It is designed to catch small spills and allow for easy cleaning. There is no drain in the tray.

NOTE: The tray can be removed from the dispenser and carried to the sink to be emptied or cleaned. Pull the tray out until it hits the stop, then gently lift up on the back of the tray and slide it out the rest of the way.

The Ice Dispenser

Ice dispenses from the ice maker storage bin in the freezer when the dispenser pad is pressed. The dispensing system will not operate when the refrigerator door is open. To turn off the ice maker, see "Ice Maker and Storage Bin."

Your ice maker can produce crushed and cubed ice. Before dispensing ice, press ICE on the display screen to select which type of ice you would like to dispense.

The display screen indicates which type of ice is selected.



For crushed ice, cubes are crushed before being dispensed. This may cause a slight delay when dispensing crushed ice. Noise from the ice crusher is normal, and pieces of ice may vary in size. When changing from crushed to cubed, a few ounces of crushed ice will be dispensed along with the first cubes.

To Dispense Ice:

1. Select the desired type of ice.

⚠ WARNING

Cut Hazard

Use a sturdy glass when dispensing ice.

Failure to do so can result in cuts.

2. Press a sturdy glass against the ice dispenser pad OR place the glass below the ice dispenser and press the ice dispenser button.



Hold the glass close to the dispenser opening so ice does not fall outside of the glass.

IMPORTANT: You do not need to apply a lot of pressure to the pad or button in order to activate the ice dispenser. Pressing hard will not make the ice dispense faster or in greater quantities.

3. Remove the glass OR release the button to stop dispensing.

NOTE: Ice may continue to dispense for up to 10 seconds after removing the glass from the pad or releasing the button. The dispenser may continue to make noise for a few seconds after dispensing.

The Dispenser Light

When you use the dispenser, the light will automatically turn on. If you want the light to be on continuously, press LIGHT on the display screen to toggle between the ON and OFF settings. The display screen indicates which mode is selected.

ON: The dispenser light will remain on at a consistent brightness.

OFF: The dispenser light will remain off except when dispensing water or ice.

The dispenser lights are LEDs that cannot be changed. If it appears that your dispenser lights are not working, see "Troubleshooting" for more information.

The Dispenser Lock

The dispenser can be turned off for easy cleaning or to avoid unintentional dispensing by small children and pets.

NOTE: The lock feature does not shut off power to the refrigerator, to the ice maker, or to the dispenser light. It simply deactivates the dispenser controls and levers. To turn off the ice maker, see "Ice Maker and Storage Bin."

- To lock the dispenser, press OPTIONS, then LOCK, then YES. The display screen will confirm when the dispenser is locked.
- To unlock the dispenser, press OPTIONS, then LOCK, then YES. The display screen will confirm when the dispenser is unlocked.

Power Outage Indicator (on some models)

The power outage indicator lets you know if the power supply to your refrigerator is cut off for more than 1 hour.

When power is restored, a power outage alert will appear on the display screen. The display shows how long the refrigerator was without power, using exact times if the clock has been set.

When the indicator is on, all other dispenser functions are disabled. To use the dispenser, you must reset the power outage indicator.

- Press RESET on the display screen, then press YES to confirm that you want to reset the indicator.

From the Home screen, you can view the power outage history for the refrigerator. Press OPTIONS, then OUTAGE.

ICE MAKER AND STORAGE BIN

The ice maker and storage bin are located in the upper left-hand side of the refrigerator compartment.

Turning the Ice Maker On/Off

Your ice maker has an automatic shutoff. When the ice maker is on, sensors will automatically stop ice production when the storage bin is full. The ice maker will remain set to ON, and ice production will resume when the bin is no longer full.

To manually turn off the ice maker, press OPTIONS on the display screen, then ICE MAKER. On the next screen, press ICE MAKER again to toggle between ON and OFF. When the ice maker is set to OFF, it will stop producing ice.

Removing and Replacing Ice Storage Bin

To Remove the Ice Storage Bin:

NOTE: It is not necessary to turn off the ice maker when removing the storage bin.

1. Pull the handle to unlock the ice storage bin.
2. Hold both sides of the ice storage bin, tilt the bin forward and lift slightly to remove.

To Replace the Ice Storage Bin:

IMPORTANT: The ice storage bin must be locked in place for proper ice dispensing.

1. Replace the ice storage bin on the door.
2. Pivot the bin so that it is firmly in place, and push back to assure that it is secure.

Ice Production Rate

- Allow 24 hours to produce the first batch of ice. Discard the first three batches of ice produced.
- The ice maker should produce approximately 40 batches of ice in a 24-hour period.
- To increase ice production, lower the freezer and refrigerator temperature. See "Using the Controls." Wait 24 hours between adjustments.

Remember

- The quality of your ice will be only as good as the quality of the water supplied to your ice maker. Avoid connecting the ice maker to a softened water supply. Water softener chemicals (such as salt) can damage parts of the ice maker and lead to poor quality ice. If a softened water supply cannot be avoided, make sure the water softener is operating properly and is well maintained.
- Do not use anything sharp to break up the ice in the bin. This can cause damage to the ice bin and dispenser mechanism.
- Do not store anything on top of the ice maker or in the ice storage bin.

The water filter status light will help you know when to change your water filter. When the water filter status display changes from "NORMAL" to "ORDER," this tells you that it is almost time to change the water filter cartridge. Replace the water filter cartridge when the water filter status display changes to "REPLACE."



If water flow to your water dispenser or ice maker decreases noticeably, change the filter sooner. The filter should be replaced at least every 6 months depending on your water quality and usage. To change the filter, see "Water Filtration System."

INDICATOR:	STATUS:
NORMAL (green)	New filter installed
ORDER (yellow)	Order filter
REPLACE (red) OR when water flow decreases	Replace water filter

After changing the water filter, reset the status light. On the display screen, press OPTIONS, then WATER FILTER, then RESET, then YES. The status light will change from REPLACE (red) to NORMAL (green) when the system is reset.

WATER FILTRATION SYSTEM

The water filter is located in the upper right-hand corner of the refrigerator compartment.

Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system. Systems certified for cyst reduction may be used on disinfected waters that may contain filterable cysts.

IMPORTANT: The disposable water filter should be replaced at least every 6 months. If the water flow to the water dispenser or ice maker decreases noticeably before 6 months have passed, replace the water filter more often.

Replacing the Water Filter

To purchase a replacement water filter, Part Number UKF8001AXX, contact your dealer or call 1-800-442-9991 in the U.S.A. or 1-800-807-6777 in Canada.

IMPORTANT: Air trapped in the water system may cause water and filter to eject. Always dispense water for at least 2 minutes before removing the filter or blue bypass cap.

1. To access the filter, press upward on the ribbed section of the water filter cover.
2. Turn filter counterclockwise to remove.
3. Remove sealing label from replacement filter and insert the filter end into the filter head.
4. Turn the filter clockwise until it stops. Snap the filter cover closed.

NOTE: The dispenser feature may be used without a water filter installed. Your water will not be filtered. If this option is chosen, replace the filter with the blue bypass cap.

REFRIGERATOR CARE

CLEANING

⚠ WARNING



Explosion Hazard

Use nonflammable cleaner.

Failure to do so can result in death, explosion, or fire.

Both the refrigerator and freezer sections defrost automatically. However, clean both sections about once a month to avoid buildup of odors. Wipe up spills immediately.

IMPORTANT: Because air circulates between both sections, any odors formed in one section will transfer to the other. You must thoroughly clean both sections to eliminate odors. To avoid odor transfer and drying out of food, wrap or cover foods tightly.

To Clean Your Refrigerator:

NOTE: Do not use abrasive or harsh cleaners such as window sprays, scouring cleansers, flammable fluids, cleaning waxes, concentrated detergents, bleaches or cleansers containing petroleum products on plastic parts, interior and door liners or gaskets. Do not use paper towels, scouring pads, or other harsh cleaning tools.

1. Unplug refrigerator or disconnect power.
2. Hand wash, rinse, and dry removable parts and interior surfaces thoroughly. Use a clean sponge or soft cloth and a mild detergent in warm water.
3. Wash stainless steel and painted metal exteriors with a clean sponge or soft cloth and a mild detergent in warm water.
 - To keep your stainless steel refrigerator looking like new and to remove minor scuffs or marks, it is suggested that you use the manufacturer's approved Stainless Steel Cleaner and Polish, Part Number 4396095. To order the cleaner, call 1-800-442-9991 U.S.A. or 1-800-807-6777 Canada.

IMPORTANT: This cleaner is for stainless steel parts only!

Do not allow the Stainless Steel Cleaner and Polish to come into contact with any plastic parts such as the trim pieces, dispenser covers or door gaskets. If unintentional contact does occur, clean plastic part with a sponge and mild detergent in warm water. Dry thoroughly with a soft cloth.

4. There is no need for routine condenser cleaning in normal home operating environments. If the environment is particularly greasy or dusty, or there is significant pet traffic in the home, the condenser should be cleaned every 2 to 3 months to ensure maximum efficiency.

If you need to clean the condenser:

- Remove the base grille.
 - Use a vacuum cleaner with a soft brush to clean the grille, the open areas behind the grille and the front surface area of the condenser.
 - Replace the base grille when finished.
5. Plug in refrigerator or reconnect power.

CHANGING THE LIGHT BULB

NOTE: Not all appliance bulbs will fit your refrigerator. Be sure to replace the bulb with an appliance bulb of the same size, shape, and wattage (no greater than 40 watts).

1. Unplug refrigerator or disconnect power.
2. Replace burned-out bulb(s) with appliance light bulb(s) no greater than 40 watts.
3. Plug in refrigerator or reconnect power.

TROUBLESHOOTING

First try the solutions suggested here or visit our website and reference FAQs (Frequently Asked Questions) to possibly avoid the cost of a service call.

In the U.S.A., www.whirlpool.com In Canada, www.whirlpool.ca

REFRIGERATOR OPERATION

The refrigerator will not operate

WARNING

Electrical Shock Hazard

Plug into a grounded 3 prong outlet.

Do not remove ground prong.

Do not use an adapter.

Do not use an extension cord.

Failure to follow these instructions can result in death, fire, or electrical shock.

- **Power cord unplugged?** Plug into a grounded 3 prong outlet.
- **Is outlet working?** Plug in a lamp to see if the outlet is working.
- **Household fuse blown or circuit breaker tripped?** Replace the fuse or reset the circuit breaker. If the problem continues, call an electrician.
- **Are controls on?** Make sure the refrigerator controls are on. See "Using the Control(s)."

- **New installation?** Allow 24 hours following installation for the refrigerator to cool completely.

NOTE: Adjusting the temperature controls to coldest setting will not cool either compartment more quickly.

The motor seems to run too much

Your new refrigerator may run longer than your old one due to its high-efficiency compressor and fans. The unit may run even longer if the room is warm, a large food load is added, doors are opened often, or if the doors have been left open.

The refrigerator seems noisy

Refrigerator noise has been reduced over the years. Due to this reduction, you may hear intermittent noises from your new refrigerator that you did not notice from your old model. Below are listed some normal sounds with explanations.

- **Buzzing** - heard when the water valve opens to fill the ice maker
- **Pulsating** - fans/compressor adjusting to optimize performance
- **Hissing/Rattling** - flow of refrigerant, movement of water lines, or from items placed on top of the refrigerator
- **Sizzling/Gurgling** - water dripping on the heater during defrost cycle
- **Popping** - contraction/expansion of inside walls, especially during initial cool-down
- **Water running** - may be heard when ice melts during the defrost cycle and water runs into the drain pan
- **Creaking/Cracking** - occurs as ice is being ejected from the ice maker mold.

The doors will not close completely

- **Door blocked open?** Move food packages away from door.
- **Bin or shelf in the way?** Push bin or shelf back into the correct position.

The doors are difficult to open

WARNING



Explosion Hazard

Use nonflammable cleaner.

Failure to do so can result in death, explosion, or fire.

- **Gaskets dirty or sticky?** Clean gaskets and contact surfaces with mild soap and warm water. Rinse and dry with soft cloth.

TEMPERATURE AND MOISTURE

Temperature is too warm

- **New installation?** Allow 24 hours following installation for the refrigerator to cool completely.
- **Door(s) opened often or left open?** Allows warm air to enter refrigerator. Minimize door openings and keep doors fully closed.
- **Large load of food added?** Allow several hours for refrigerator to return to normal temperature.
- **Controls set correctly for the surrounding conditions?** Adjust the controls a setting colder. Check temperature in 24 hours. See "Using the Control(s)."

There is interior moisture buildup

NOTE: Some moisture buildup is normal.

- **Humid room?** Contributes to moisture buildup.
- **Door(s) opened often or left open?** Allows humid air to enter refrigerator. Minimize door openings and keep doors fully closed.

ICE AND WATER

The ice maker is not producing ice or not enough ice

- **Refrigerator connected to a water supply and the supply shutoff valve turned on?** Connect refrigerator to water supply and turn water shutoff valve fully open.
- **Kink in the water source line?** A kink in the line can reduce water flow. Straighten the water source line.
- **Ice maker turned on?** Make sure ice maker is on. See "Ice Maker and Storage Bin."
- **New installation?** Wait 24 hours after ice maker installation for ice production to begin. Wait 72 hours for full ice production.
- **Refrigerator door closed completely?** Close the door firmly. If it does not close completely, see "The doors will not close completely."
- **Large amount of ice recently removed?** Allow 24 hours for ice maker to produce more ice.
- **Ice cube jammed in the ice maker ejector arm?** Remove ice from the ejector arm with a plastic utensil.
- **Water filter installed on the refrigerator?** Remove filter and operate ice maker. If ice volume improves, then the filter may be clogged or incorrectly installed. Replace filter or reinstall it correctly.
- **Reverse osmosis water filtration system connected to your cold water supply?** This can decrease water pressure. See "Water Supply Requirements."

The ice cubes are hollow or small

NOTE: This is an indication of low water pressure.

- **Water shutoff valve not fully open?** Turn the water shutoff valve fully open.
- **Kink in the water source line?** A kink in the line can reduce water flow. Straighten the water source line.
- **Water filter installed on the refrigerator?** Remove filter and operate ice maker. If ice quality improves, then the filter may be clogged or incorrectly installed. Replace filter or reinstall it correctly.
- **Reverse osmosis water filtration system connected to your cold water supply?** This can decrease water pressure. See "Water Supply Requirements."
- **Questions remain regarding water pressure?** Call a licensed, qualified plumber.

Off-taste, odor or gray color in the ice

- **New plumbing connections?** New plumbing connections can cause discolored or off-flavored ice.
- **Ice stored too long?** Discard ice. Wash ice bin. Allow 24 hours for ice maker to make new ice.
- **Odor transfer from food?** Use airtight, moisture proof packaging to store food.
- **Are there minerals (such as sulfur) in the water?** A water filter may need to be installed to remove the minerals.
- **Water filter installed on the refrigerator?** Gray or dark discoloration in ice indicates that the water filtration system needs additional flushing. Flush the water system before using a new water filter. Replace water filter when indicated. See "Water Filtration System."

The water and ice dispenser will not operate properly

- **Refrigerator connected to a water supply and the supply shutoff valve turned on?** Connect refrigerator to water supply and turn water shutoff valve fully open.
- **Kink in the water source line?** Straighten the water source line.
- **New installation?** Flush and fill the water system. See "Water and Ice Dispenser."
- **Is the water pressure at least 35 psi (241 kPa)?** The water pressure to the home determines the flow from the dispenser. See "Water Supply Requirements."
- **Water filter installed on the refrigerator?** Remove filter and operate dispenser. If water flow increases, the filter may be clogged or incorrectly installed. Replace filter or reinstall it correctly.
- **Refrigerator door closed completely?** Close the door firmly. If it does not close completely, see "The doors will not close completely."
- **Recently removed the doors?** Make sure the water dispenser wire/tube assembly has been properly reconnected at the top of the refrigerator door. See "Refrigerator Doors and Drawer."
- **Reverse osmosis water filtration system connected to your cold water supply?** This can decrease water pressure. See "Water Supply Requirements."

Water is leaking from the dispenser system

NOTE: One or two drops of water after dispensing is normal.

- **Glass not being held under the dispenser long enough?** Hold the glass under the dispenser 2 to 3 seconds after releasing the dispenser lever.
- **New installation?** Flush the water system. See "Water and Ice Dispenser."
- **Recently changed water filter?** Flush the water system. See "Water and Ice Dispenser."

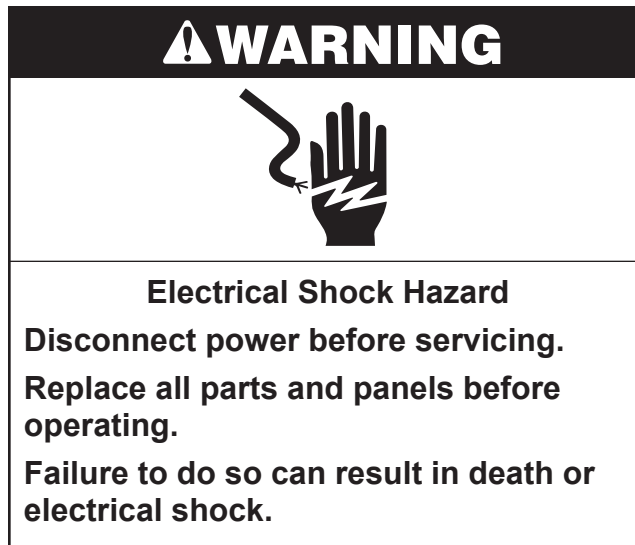
Water from the dispenser is warm

NOTE: Water from the dispenser is only chilled to 50°F (10°C).

- **New installation?** Allow 24 hours after installation for the water supply to cool completely.
- **Recently dispensed large amount of water?** Allow 24 hours for water supply to cool completely.
- **Water not been recently dispensed?** The first glass of water may not be cool. Discard the first glass of water.
- **Refrigerator connected to a cold water pipe?** Make sure the refrigerator is connected to a cold water pipe. See "Water Supply Requirements."

— NOTES —

PRODUCT OPERATION



MAIN CONTROL BOARD

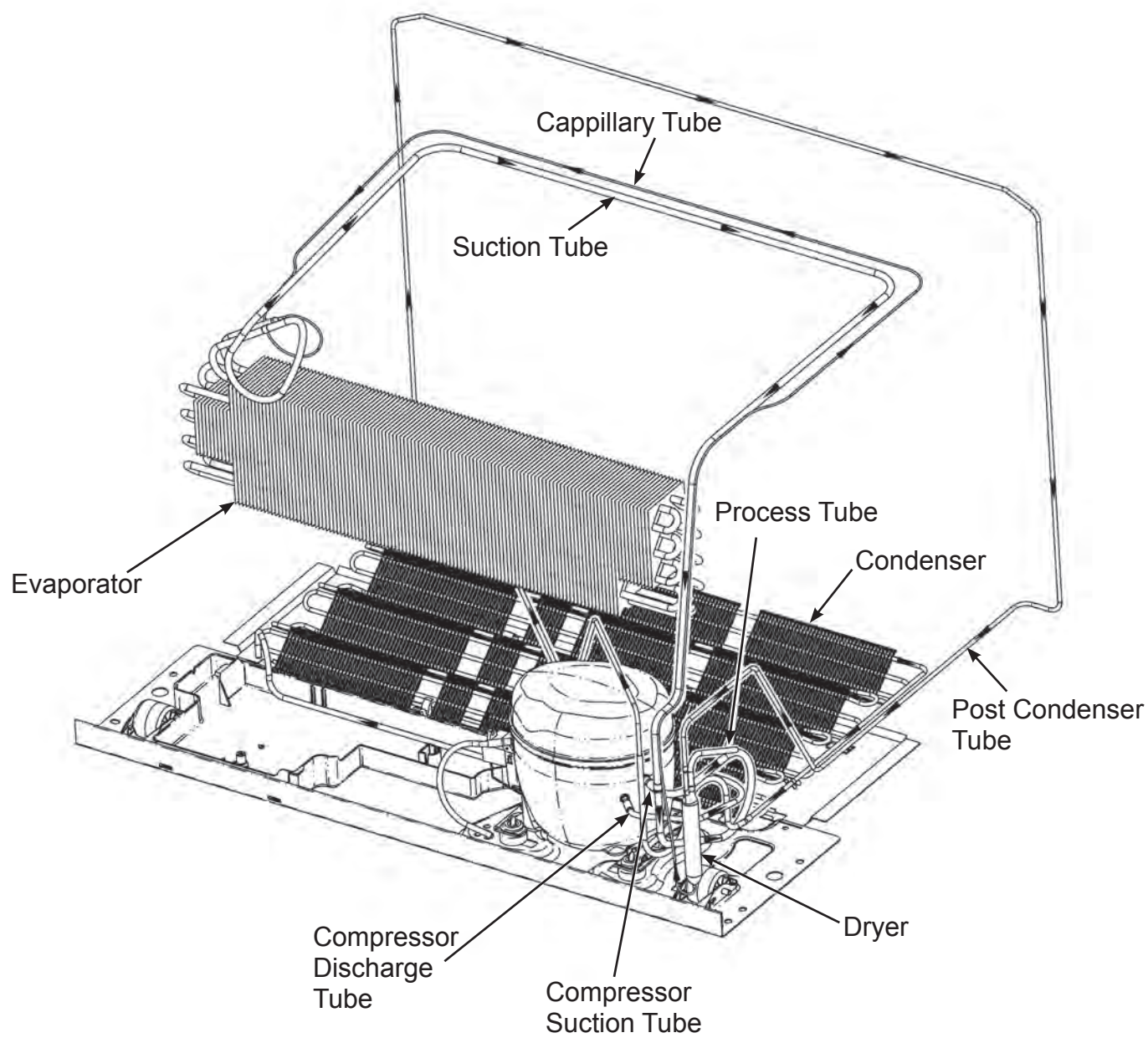
Control System Overview:

The control provides independent temperature control for the Refrigerator, Freezer and Ice Maker compartments by monitoring NTC Thermistors for the actual temperature of each compartment. It also considers the ambient temperature measured by a sensor. It receives temperature set points of each compartment from an externally connected user interface, except for the Ice Maker compartment which is internally defined. Based on these inputs, the control determines the required state of the Compressor, Evaporator Fan and Air Baffle. The optimal defrost times are determined by monitoring the length of time required to defrost the evaporator compared to an ideal defrost length.

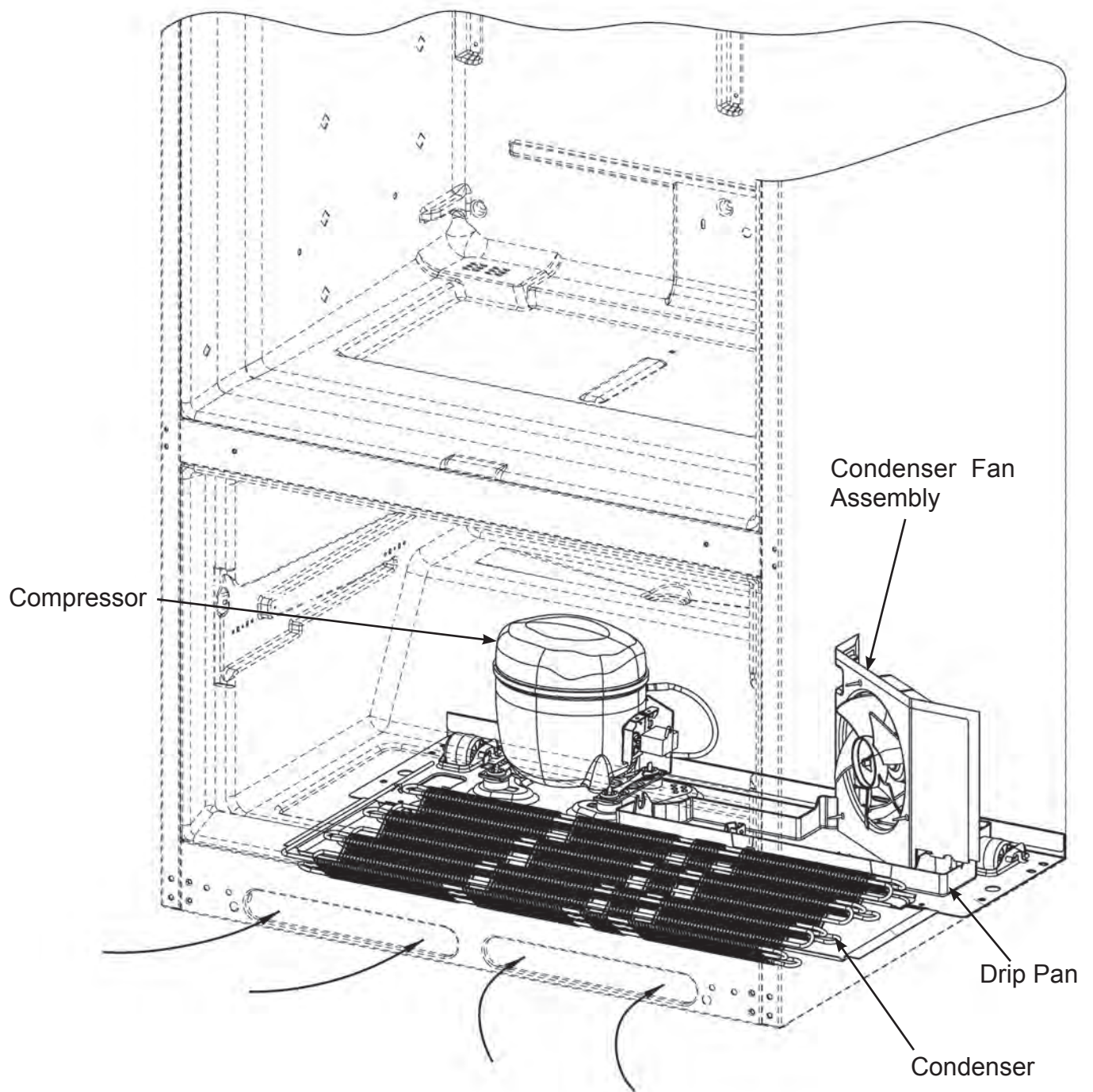
Board Over Temperature Operation – Control Board has an onboard thermistor. If thermistor detects a temperature of 75 C/167F or higher, all thermostatic loads will turn off. Normal operation will resume when the thermistor senses a temperature of 60C/140F or less.

Compartment Lights – All compartment lights turn off after 10 minutes of door being open, no matter which door is open. Note: In Service Mode, in the diagnostic steps the lights work normally and will turn off after 10 minutes of elapsed time.

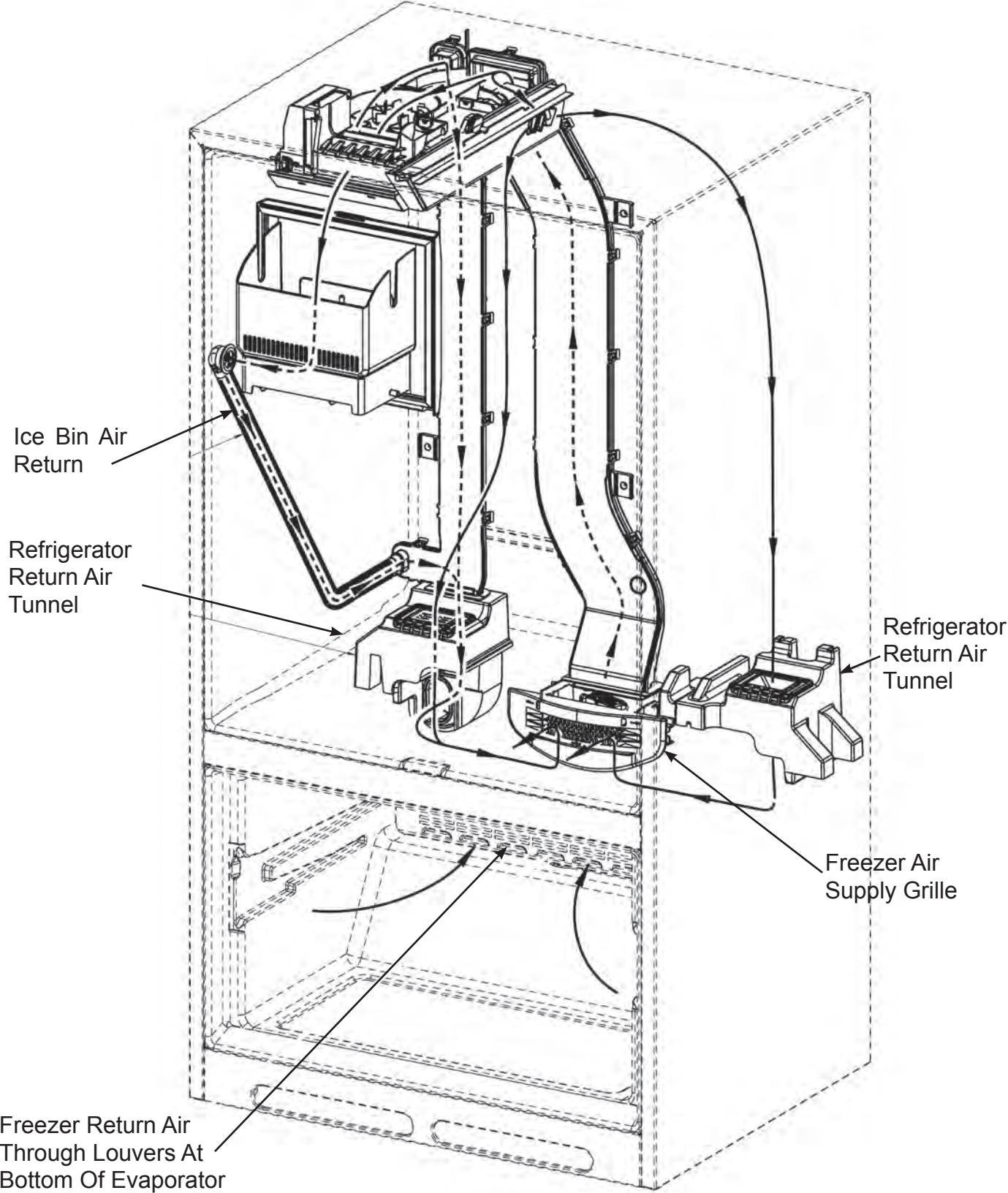
REFRIGERATION SYSTEM FLOW



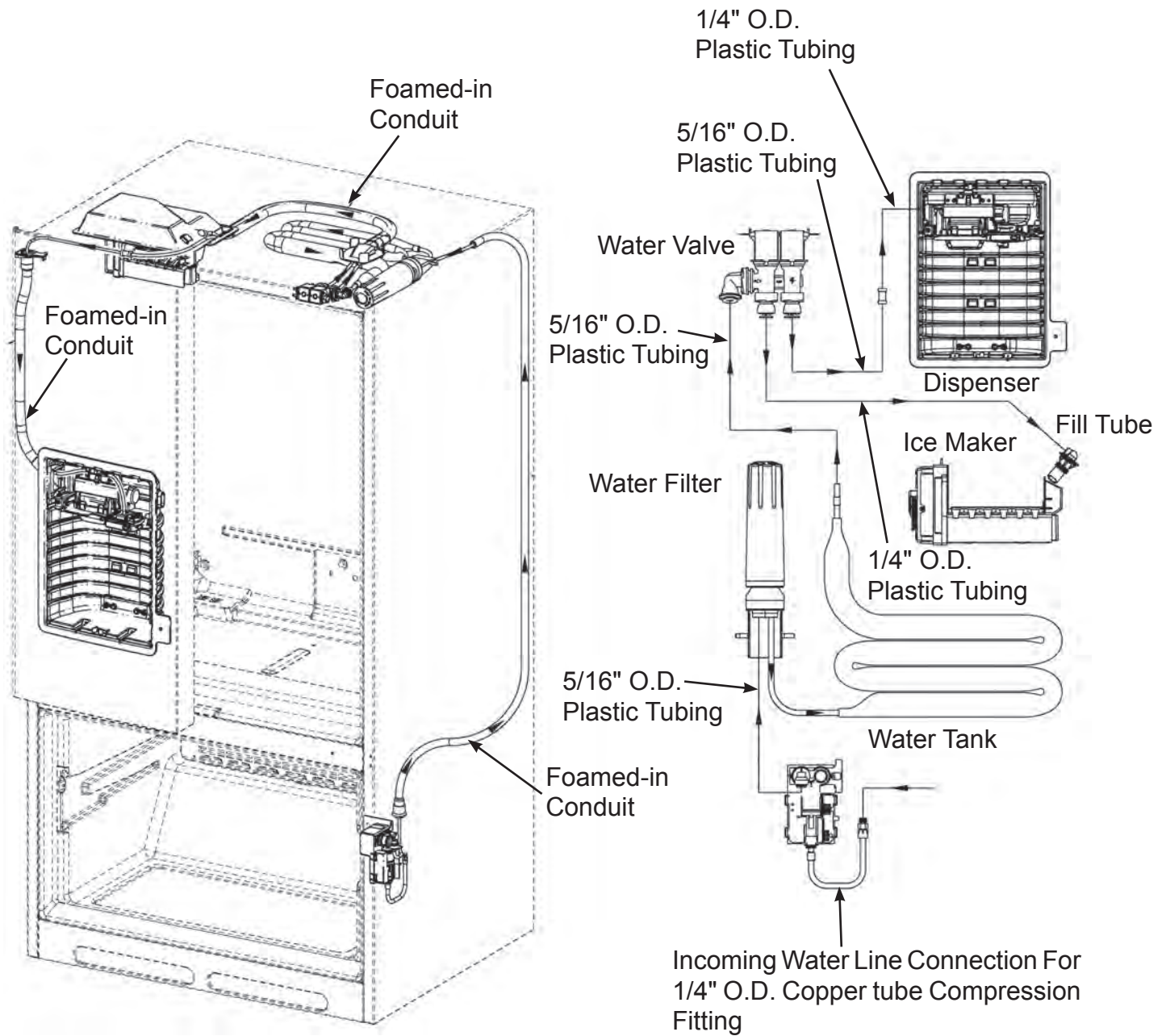
MACHINE COMPARTMENT AIR FLOW



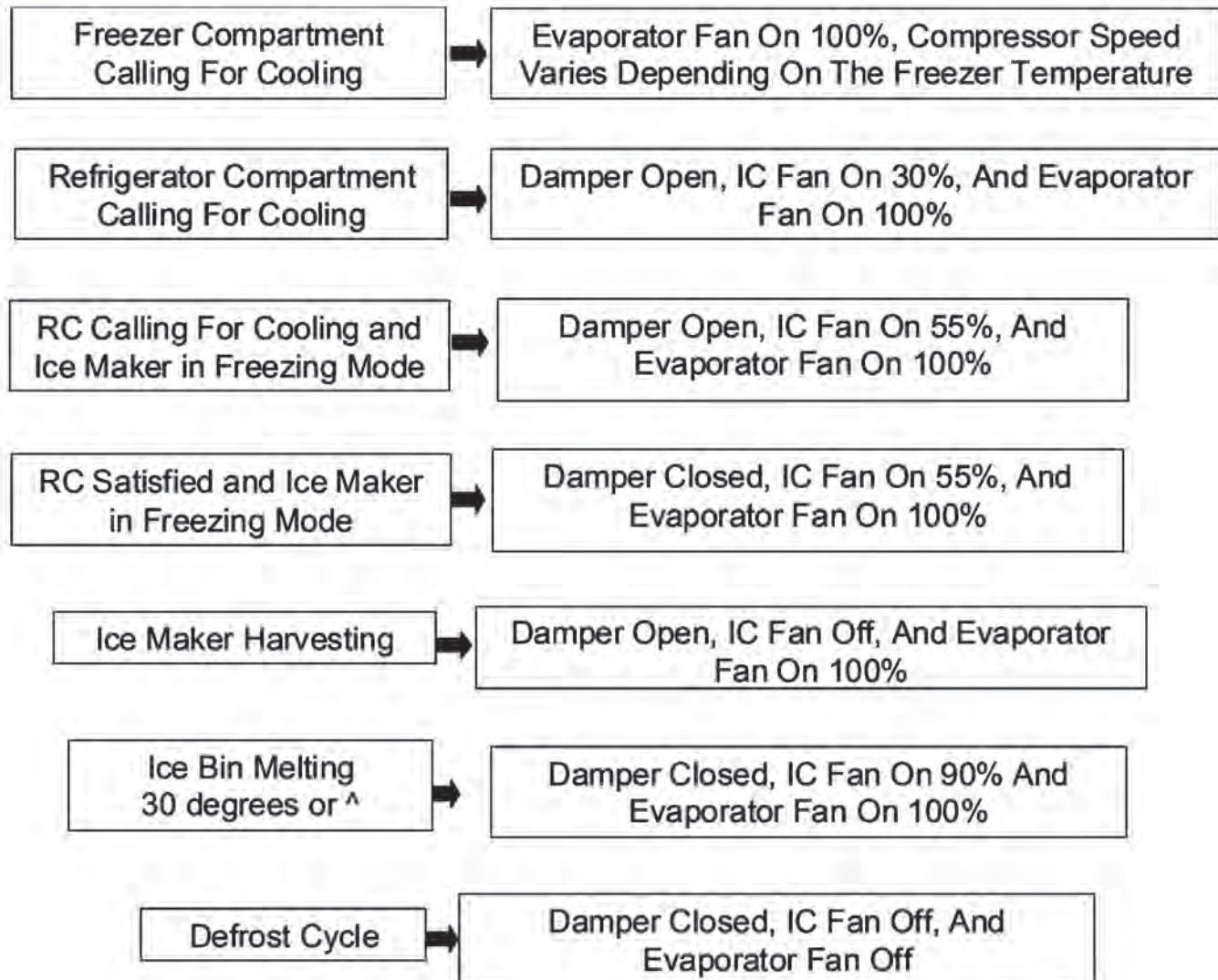
CABINET AIR FLOW



CABINET WATER FLOW



ICE COMPARTMENT AND FREEZER FAN OPERATION



Ice Compartment and Freezer Fan Operation

Freezer Compartment Calling For Cooling - Evaporator Fan On 100%, Compressor Speed Varies Depending On the Freezer Temperature

Refrigerator Compartment Calling For Cooling - Damper Open, IC Fan On 30%, And Evaporator Fan On 100%

RC Calling for Cooling and Ice Maker in Freeze Cycle - Damper Open, IC Fan On 55%, And Evaporator Fan On 100%

RC Satisfied and Ice Maker in Freezing Mode - Damper Closed, IC Fan On 55%, And Evaporator Fan On 100%

Ice Maker Harvesting - Damper Open, IC Fan Off, and Evaporator Fan On 100%

Ice Bin Melting 30 degrees or ^ - Damper Closed, IC Fan On 90% And Evaporator Fan On 100%

Defrost Cycle - Damper Closed, IC Fan Off, And Evaporator Fan Off

ACCESSING DISPENSER SWITCHES

! WARNING



Electrical Shock Hazard

Disconnect power before servicing.

Replace all parts and panels before operating.

Failure to do so can result in death or electrical shock.

User Interface Board



Humidity Sensor and Ambient Thermistor are Located on the User Interface Board. The user interface board is sold as an assembly.

Ambient Thermistor

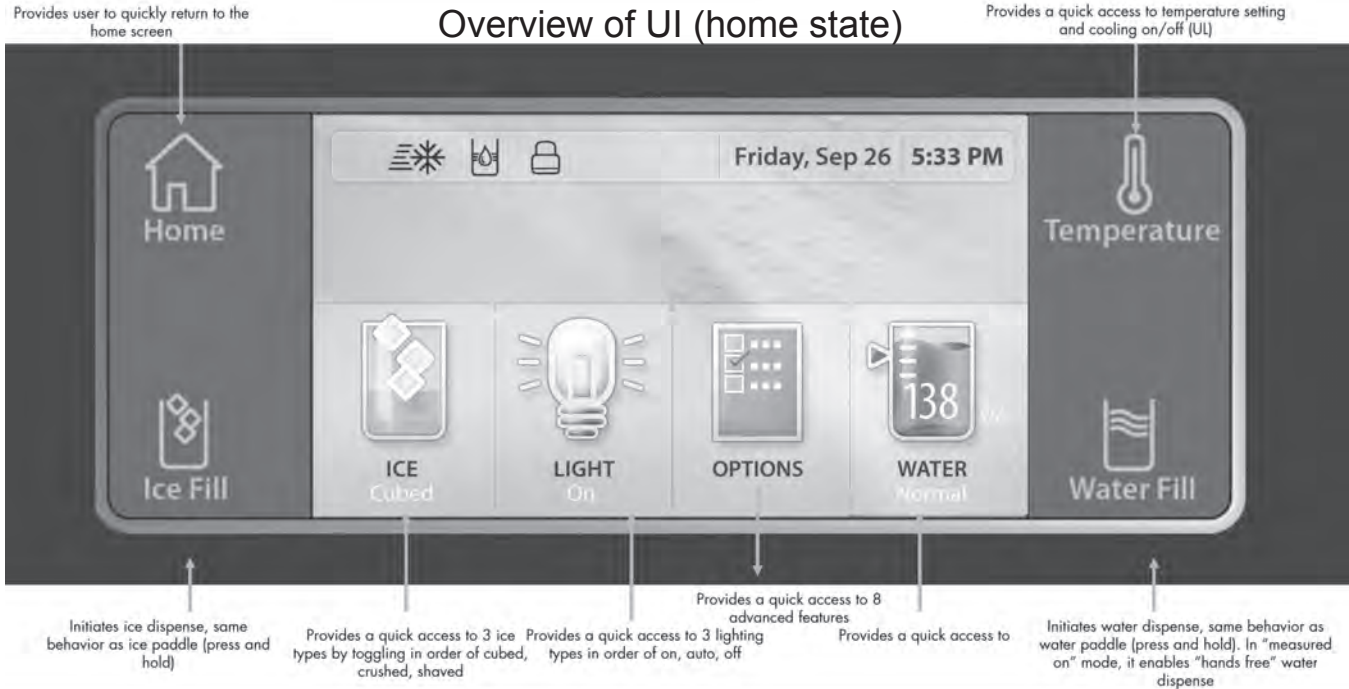
The ambient thermistor information is used in an equation to adjust the control temperature values. As the ambient temperature changes the control value will shift to correct for the change. This helps maintain the compartment temperatures at the set value on the user interface. The ambient temperature may or may not be used for all of the compartments but it can be. It depends on a regression equation calculated from results of testing performed in the lab. The Humidity sensor is used in an equation to adjust the Wattage output of the mullion heater. The mullion heater operates at 0, 30, 70 or 100% of its rated Wattage

Humidity Sensor

The Humidity sensor is used in an equation to adjust the Wattage output of the mullion heater. The mullion heater operates at 0, 30, 70 or 100% of it's rated Wattage.

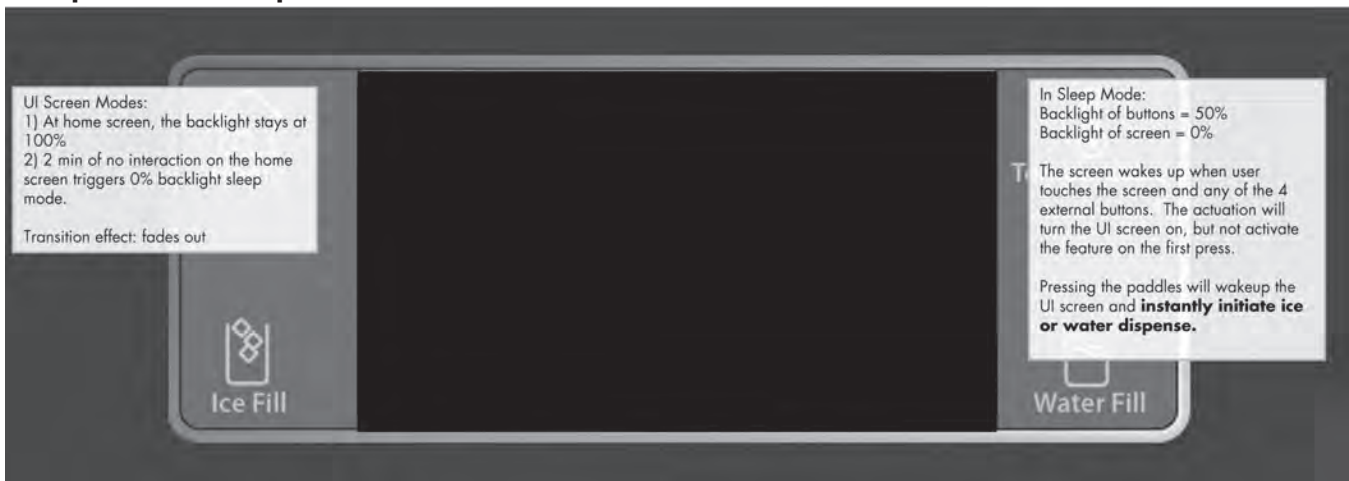
USING THE CONTROL DISPLAY

Overview of UI (home state)



SCREENSAVER AND MEASURED FILL

Sleep Mode / Sleep Mode State



Measured fill / Measured off (=Home)



SCREENSAVER AND MEASURED FILL (continued)

Measured fill / Measured off (=Home)

The default measured fill amount is 8 ounces, 1 cup, or 0.25 liters.

The order of units: ounces -> cups -> liters

Pressing the water button or home button will return the user to the home screen. The screen transitions in similar fashion as when the panel first slid out.

FOR STORING A NEW PRESET:
When a user presses and holds the preset button after 60ms, the value and the unit blink three times. On the fourth blink, the value on the water icon will be displayed and stored in the preset accompanied by the confirmation chime.

After 5 seconds of inactivity, the UI will automatically return to the home screen.

← Back

measured fill

preset 1: 14 oz

preset 2: 3 cups

preset 3: --

press & hold for 3 seconds to save

amount

units ounces

0 oz.

Water measured on

Water Fill

Pressing and holding the increment / decrement amount buttons for 3s shall start slewing incrementing / decrementing the water amount selected at 4Hz rate (i.e., 4 changes / second) – identical to Niagara II spec.

Measured fill / Dispensing State

The water dispense animation is displayed as water is dispensed.

Pressing the fill button will activate a hands free dispense of the entire pre-measured amount. Pressing the fill button or water pad during a hands free dispense will stop the flow of water and pause the countdown animation. The UI returns to the setup screen and displays the amount remaining to be dispensed. After 5s of inactivity, the screen returns to the home screen.

The water pad will also dispense the pre-measured amount of water. However, the pad must be continually pressed for the duration of the fill. If the pad is released, the flow of water will stop and the countdown will pause. The UI returns to the setup screen and displays the amount remaining to be dispensed.

← Back

measured fill

preset 1: 14 oz

preset 2: 3 cups

preset 3: --

press & hold for 3 seconds to save

amount

units ounces

3 oz.

Water measured on

Dual dispensing (ice / water) is permitted for all UI states by returning the screen to the home screen.

If the user presses the ice fill or ice paddle, the preset and the amount column slides in and the water button remains in the current state (in-process or complete state). The ice dispensing animation will be shown.

When the ice dispensing is complete, the screen returns to the measured fill screen.

SPECIAL WARNING:
If the water dispensing is continued for 5min, the alert chime will be produced.

Measured Fill / Complete / Standby State

After the dispense is complete the pre-measured amount and unit is displayed on the screen.

Pressing the water button or home button will return the user to the home screen. The screen transitions in similar fashion as when the panel first slid out.

After 5 seconds of inactivity, the UI will automatically return to the home screen.

← Back

measured fill

preset 1: 14 oz

preset 2: 3 cups

preset 3: --

press & hold for 3 seconds to save

amount

units ounces

0 oz.

Water measured on

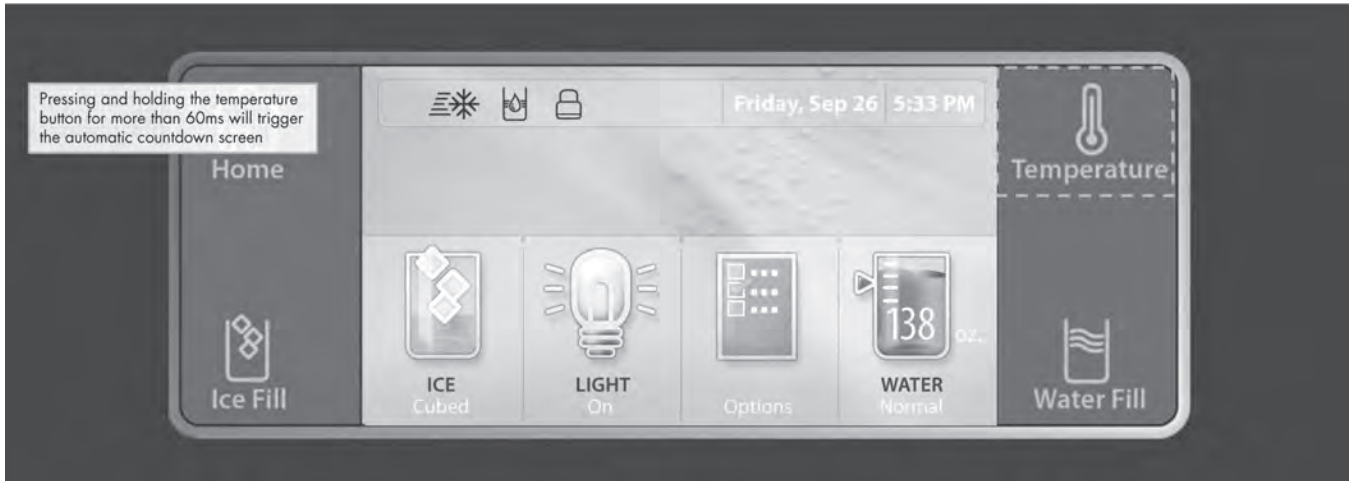
Ice Fill

Temperature

Water Fill

COOLING ON / OFF SCREEN

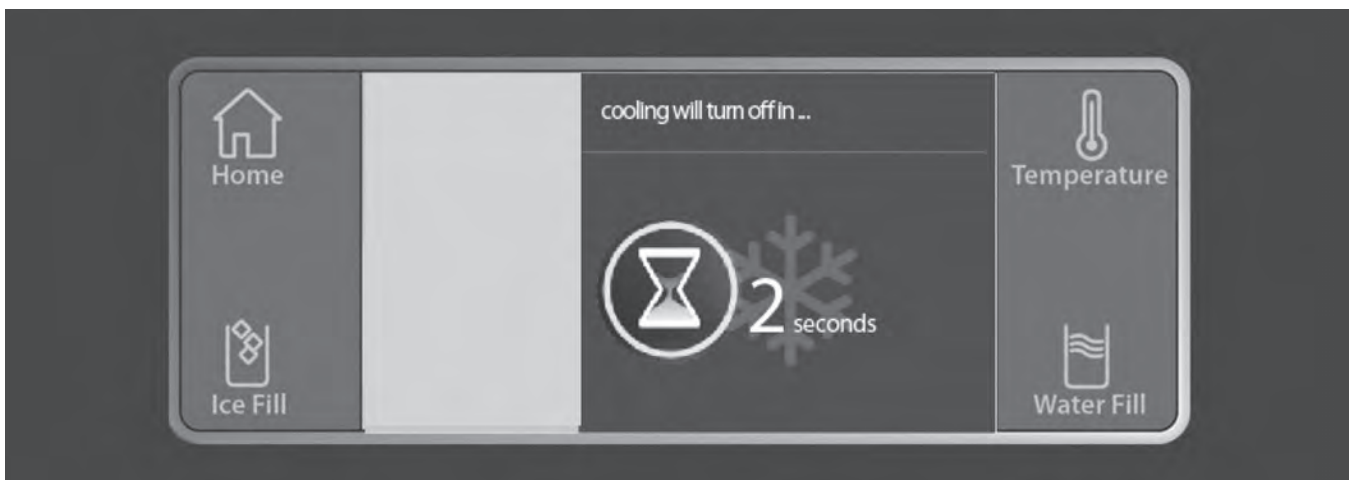
Cooling / Home State



Cooling Off Countdown State

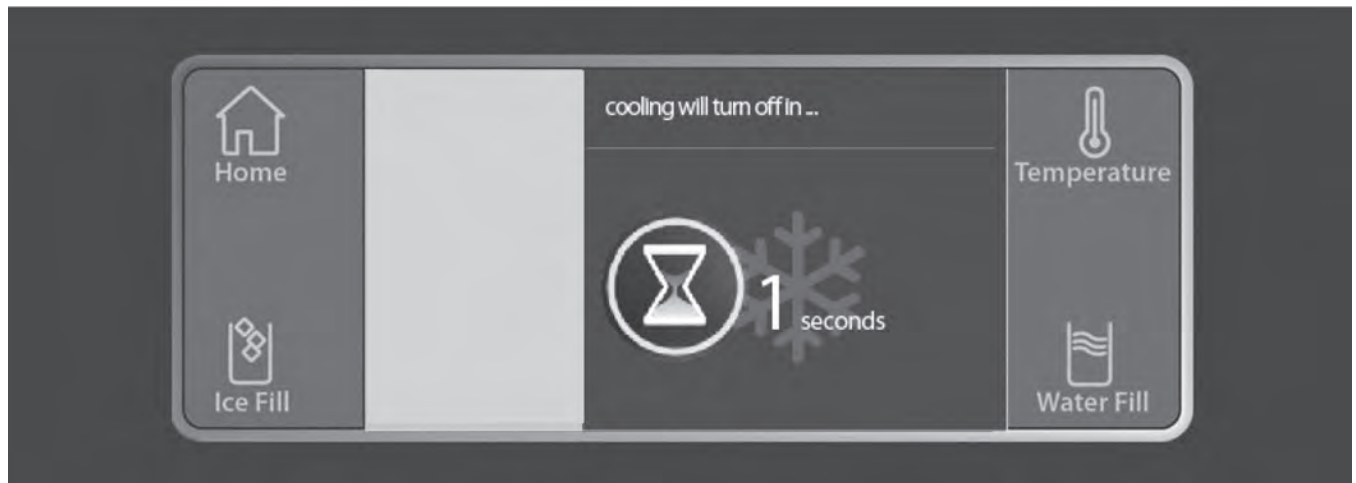


Cooling Off Countdown State



COOLING ON / OFF SCREEN (continued)

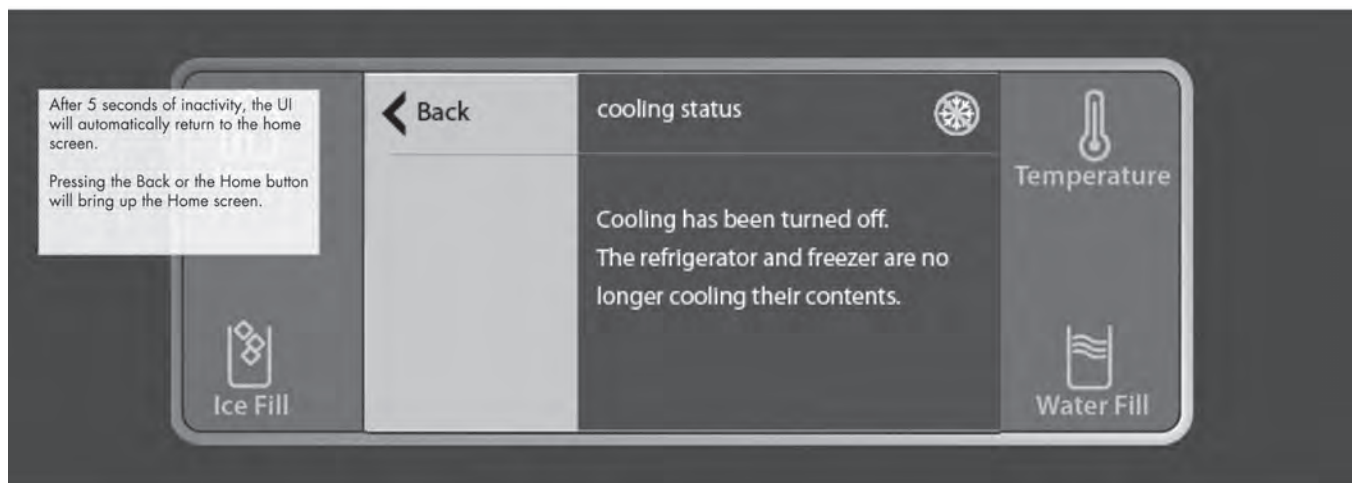
Cooling Off Countdown State



Cooling Off Indicator / Cooling Off Active State



Cooling Off Indicator / Cooling Status Information State



COOLING ON / OFF SCREEN (continued)

Cooling Off Indicator / Home State



Cooling On / Off / Cooling On Countdown State

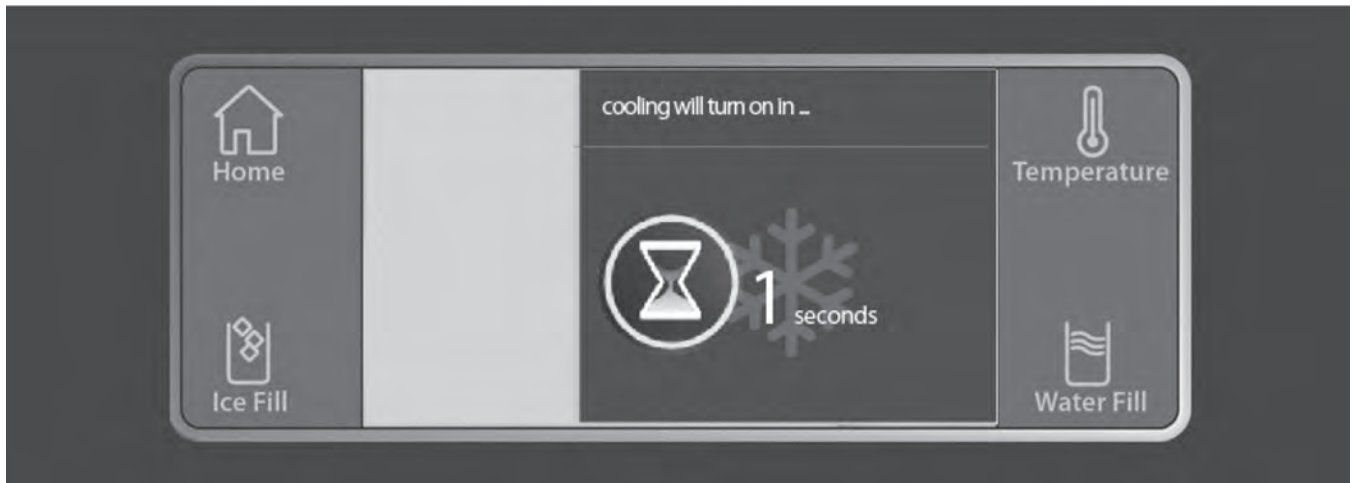


Cooling On / Off / Cooling On Countdown State



COOLING ON / OFF SCREEN (continued)

Cooling On / Off / Cooling On Countdown State



Cooling Off Indicator / Home State

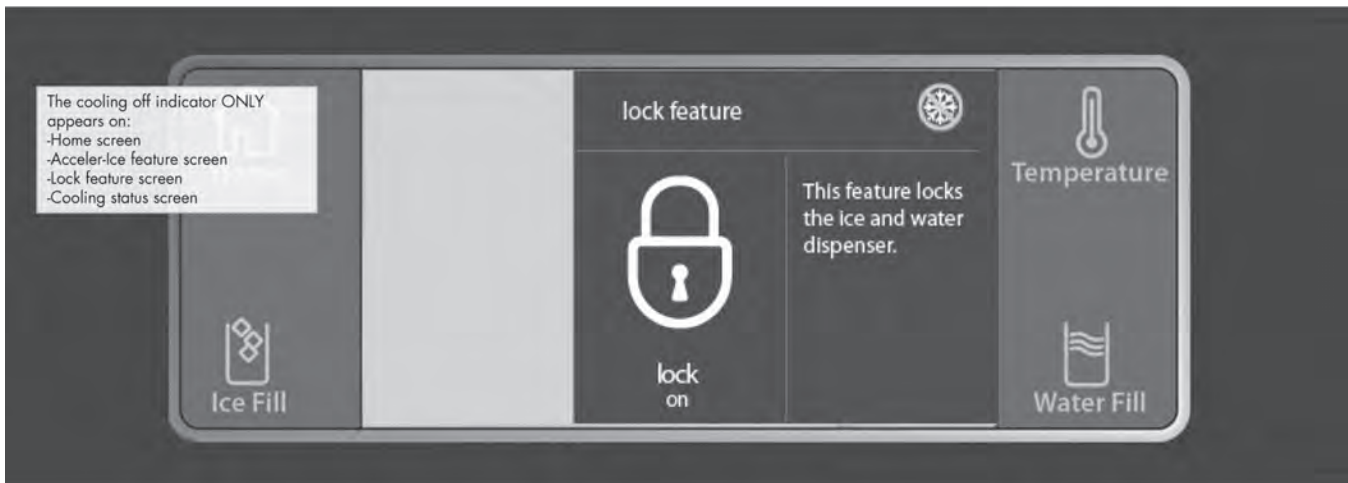


Cooling On / Off / Fast Cool Disabled State



COOLING ON / OFF SCREEN (continued)

Cooling Off Indicator / Locked State

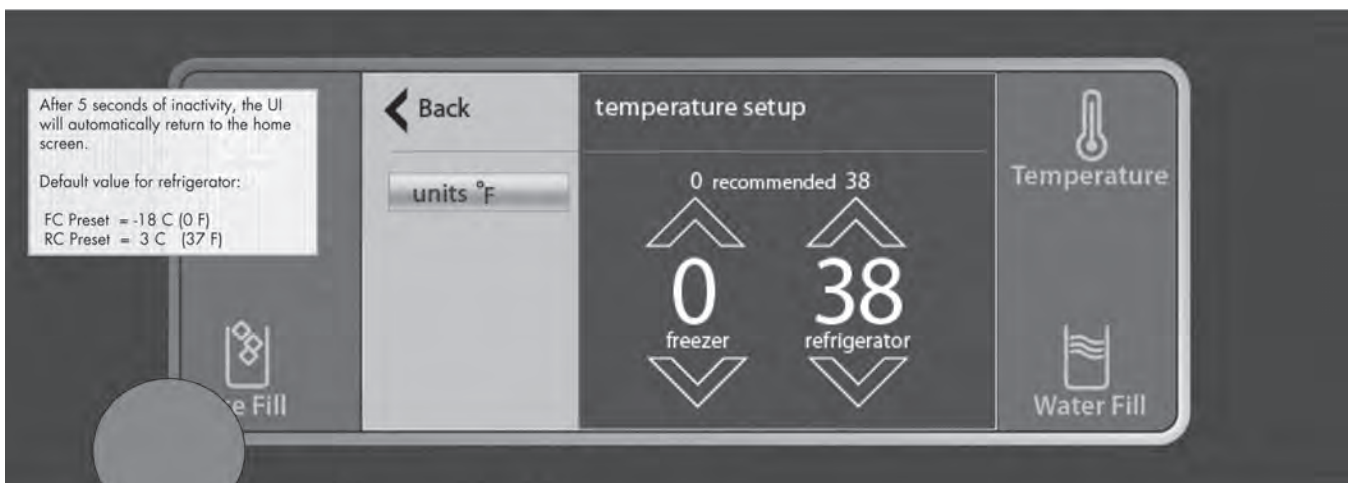


TEMPERATURE SETTING SCREEN

Cooling / Home State

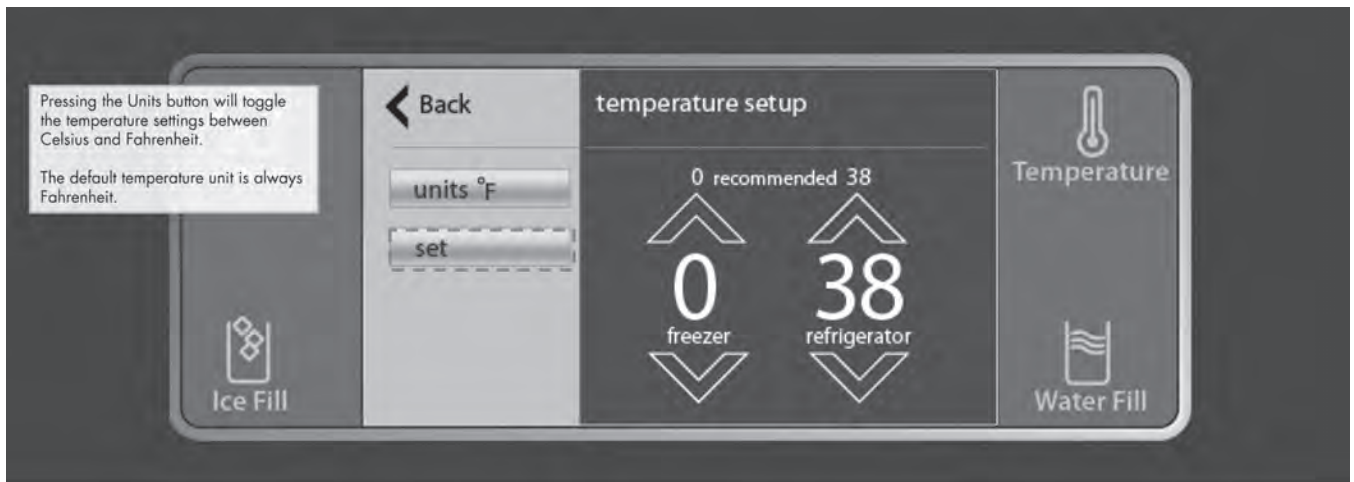


Cooling / Cooling Setup State

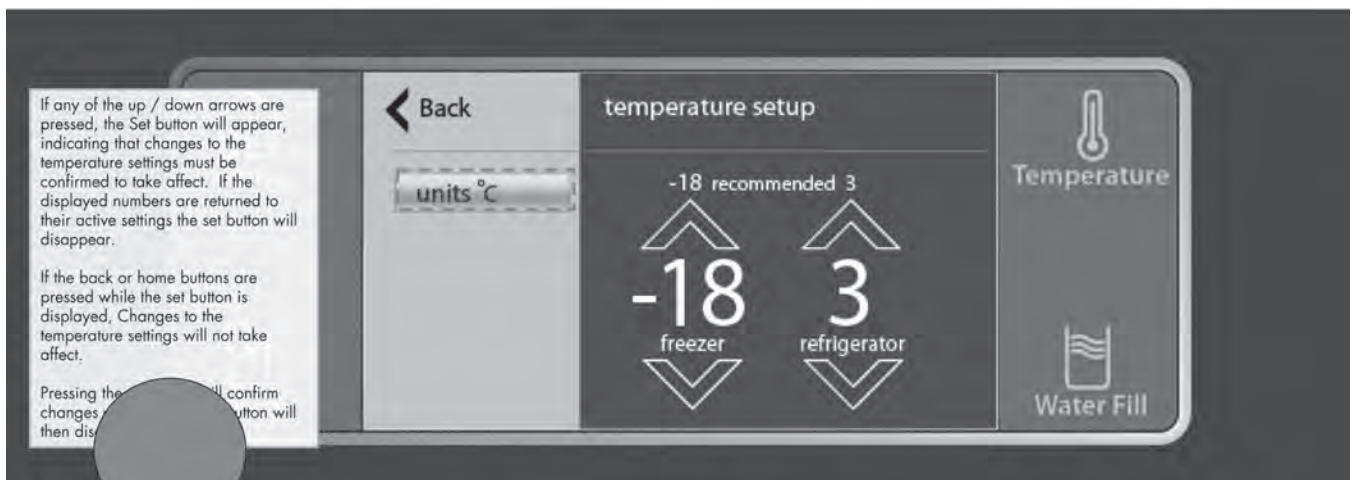


TEMPERATURE SETTING SCREEN (continued)

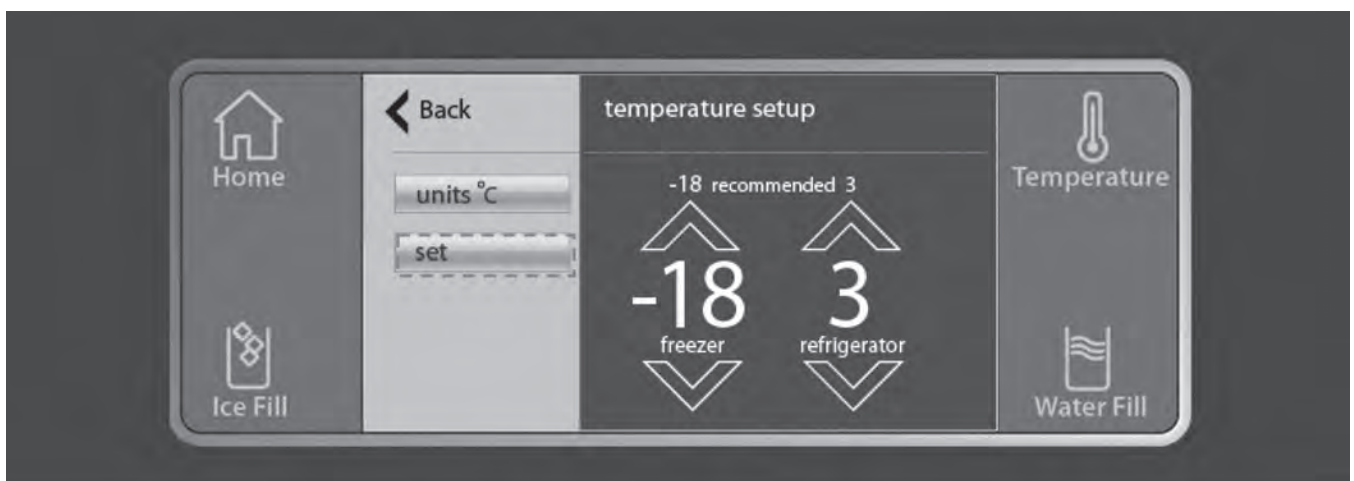
Cooling / Setting Unit State



Cooling / Setting Temperature State



Cooling / Setting Unit Complete State



ALERT SCREEN – DOOR AJAR, FILTER RESET

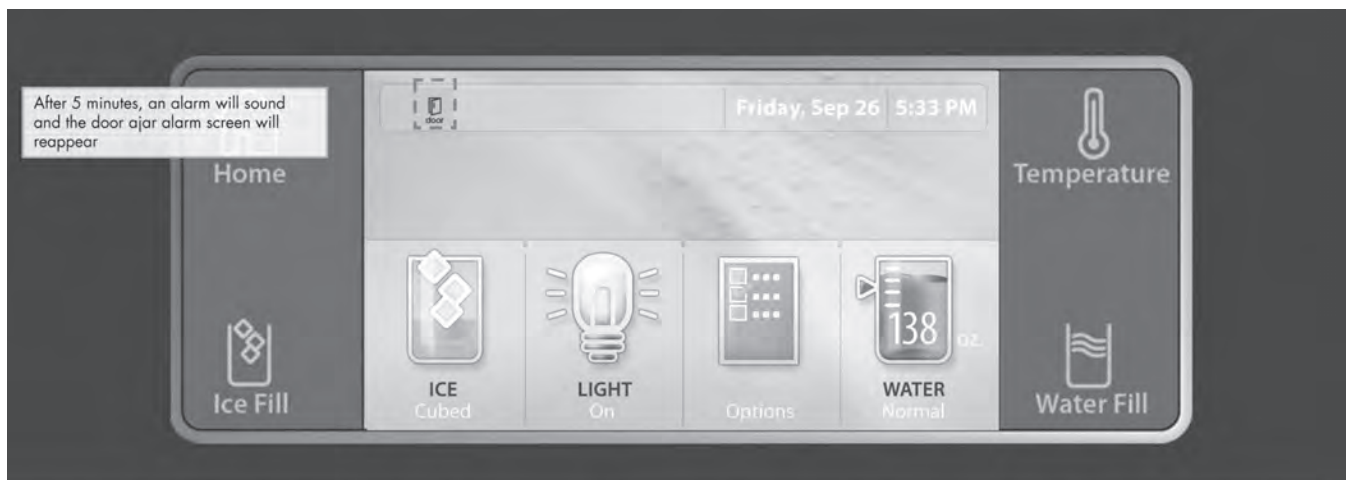
Door Alarm Indicator / Door Alarm Active State



Door Alarm Indicator / Door Alarm Alert Screen State



Door Alarm Indicator / Door Alarm Snooze State (=Active State)

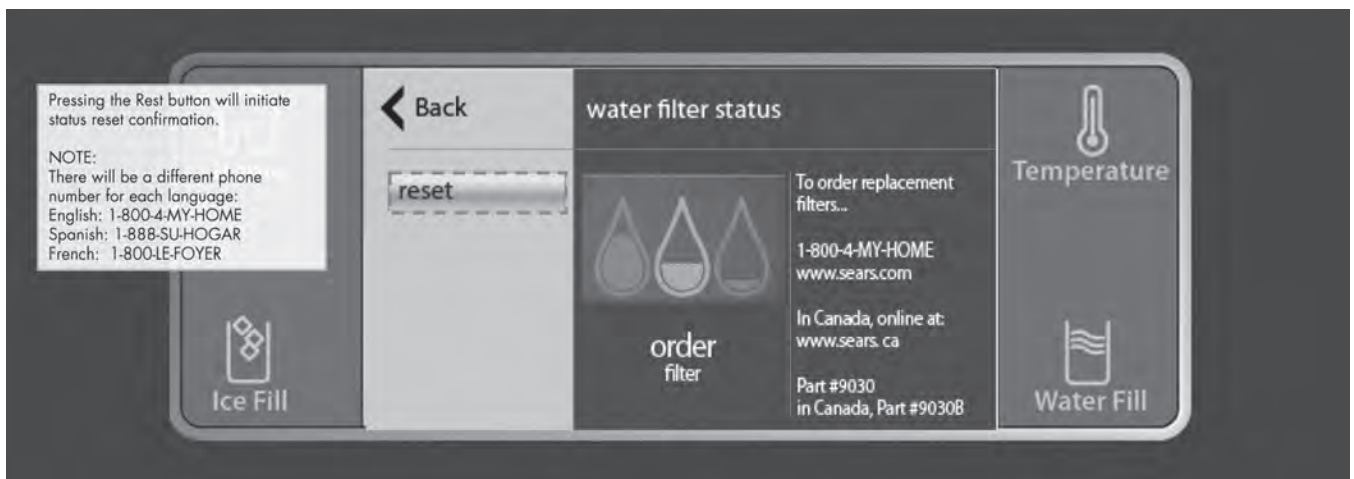


ALERT SCREEN – DOOR AJAR, FILTER RESET (continued)

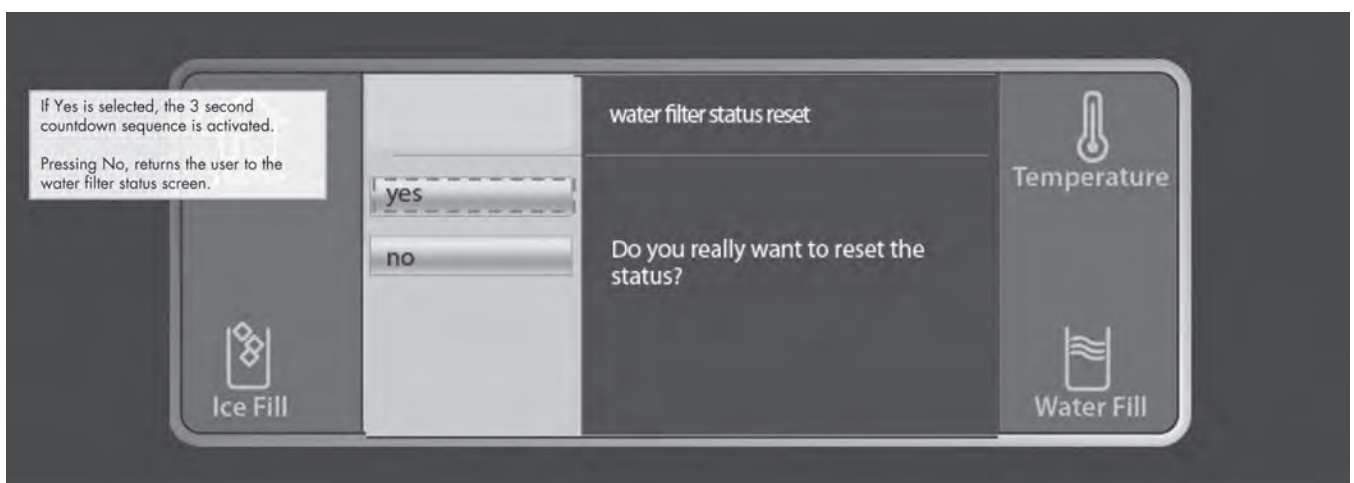
Water Filter Indicator / Water Filter Order State



Water Filter Status / Water Filter Setup State

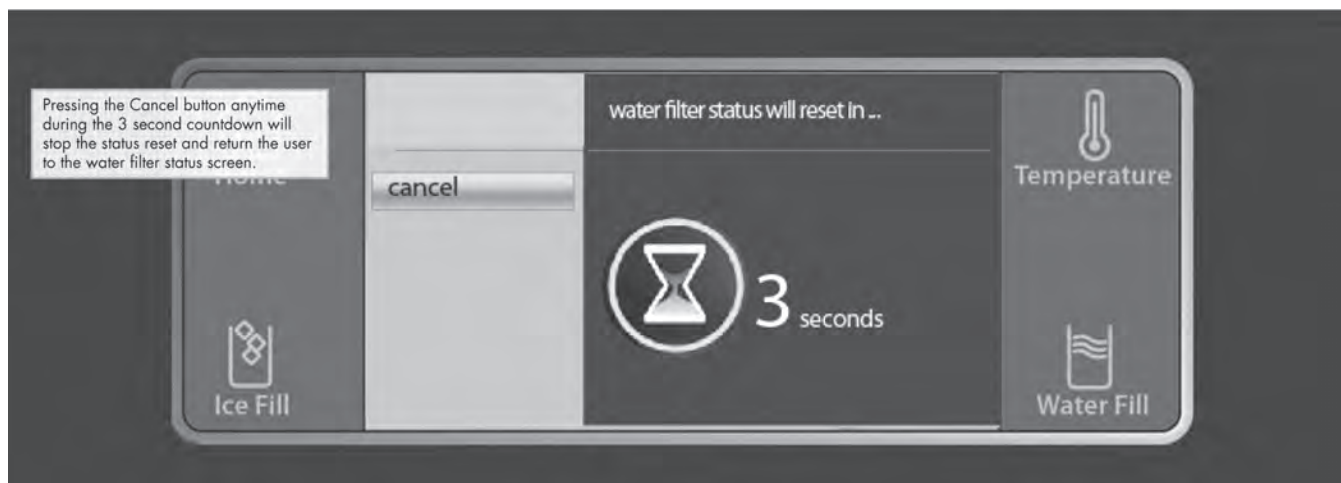


Water Filter Alert / Water Filter Confirmation State

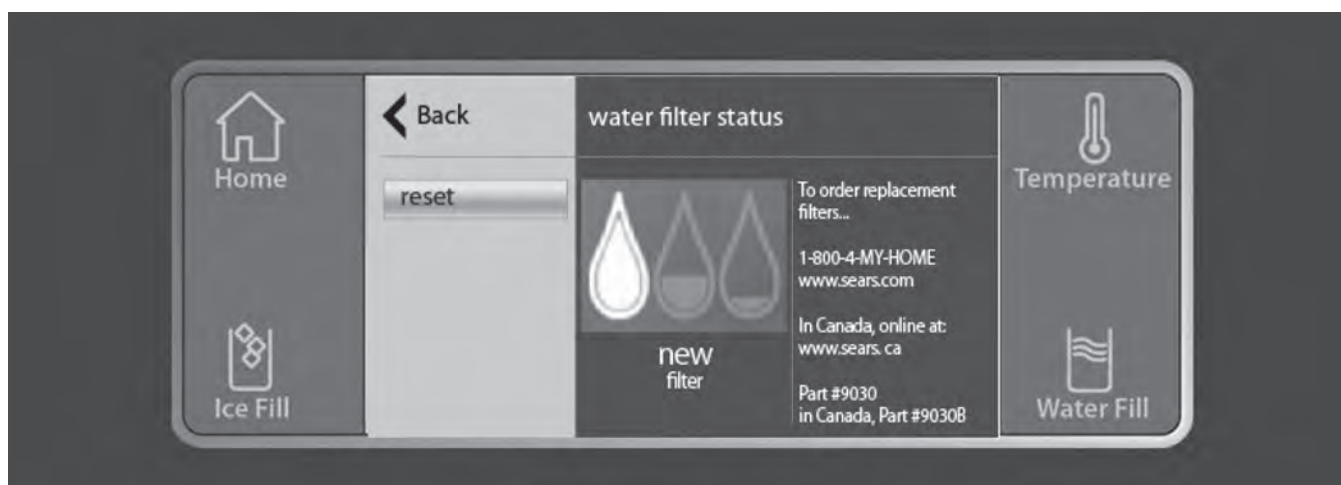


ALERT SCREEN – DOOR AJAR, FILTER RESET (continued)

Water Filter Alert / Water Filter Countdown State



Water Filter Status / Water Filter Setup State



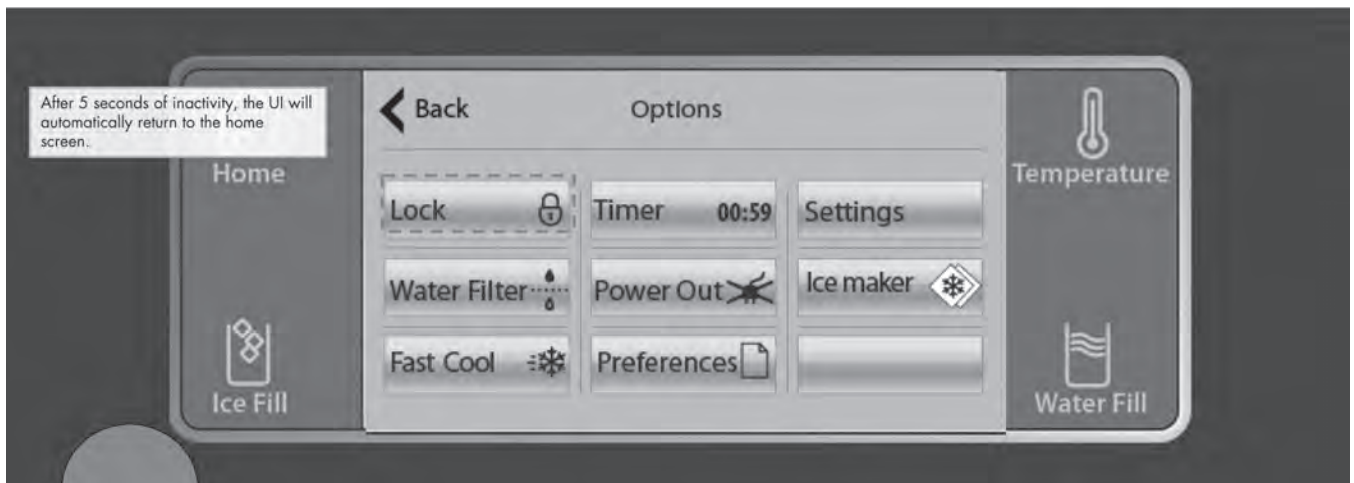
ALERT SCREEN – GLOBAL ALERTS

Alert Indicator Management / Multiple Alert Indicators State

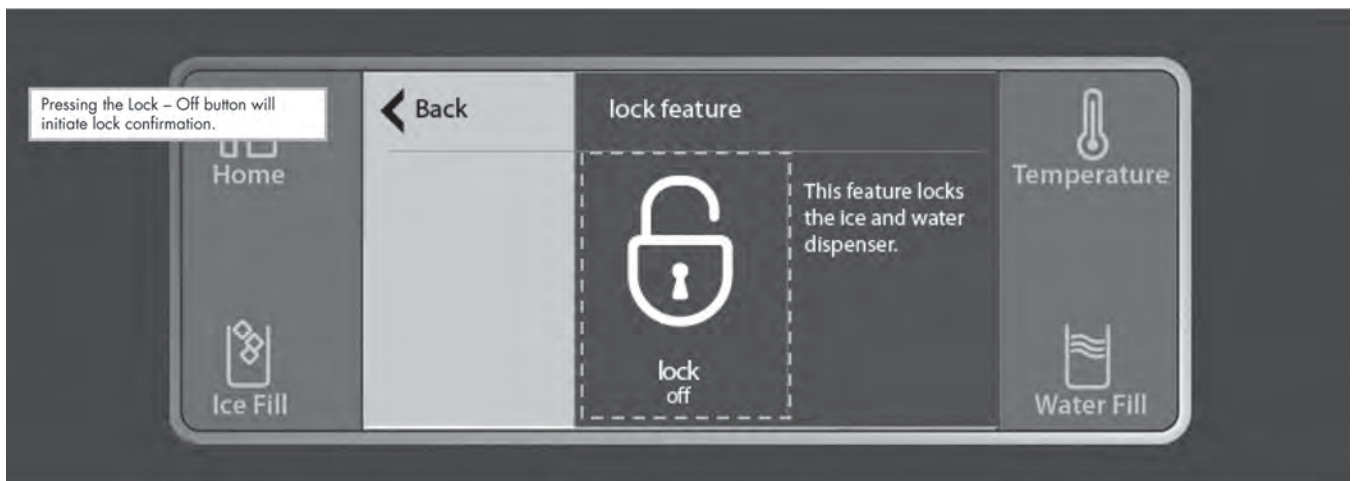


ADVANCED FEATURES SCREEN

Features / Features Menu State

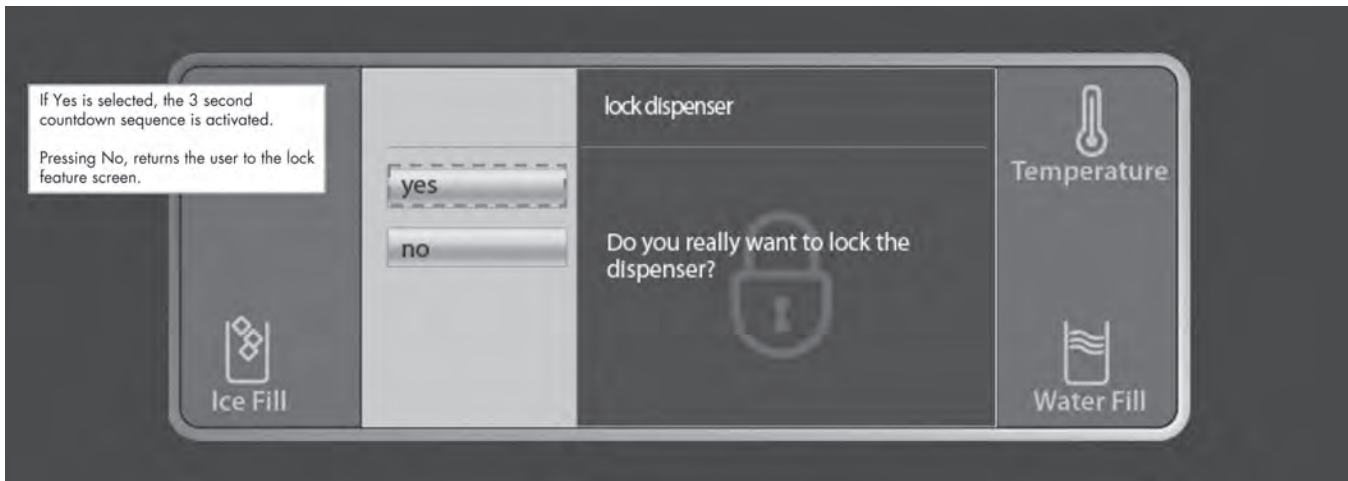


Dispenser Lock / Unlocked State

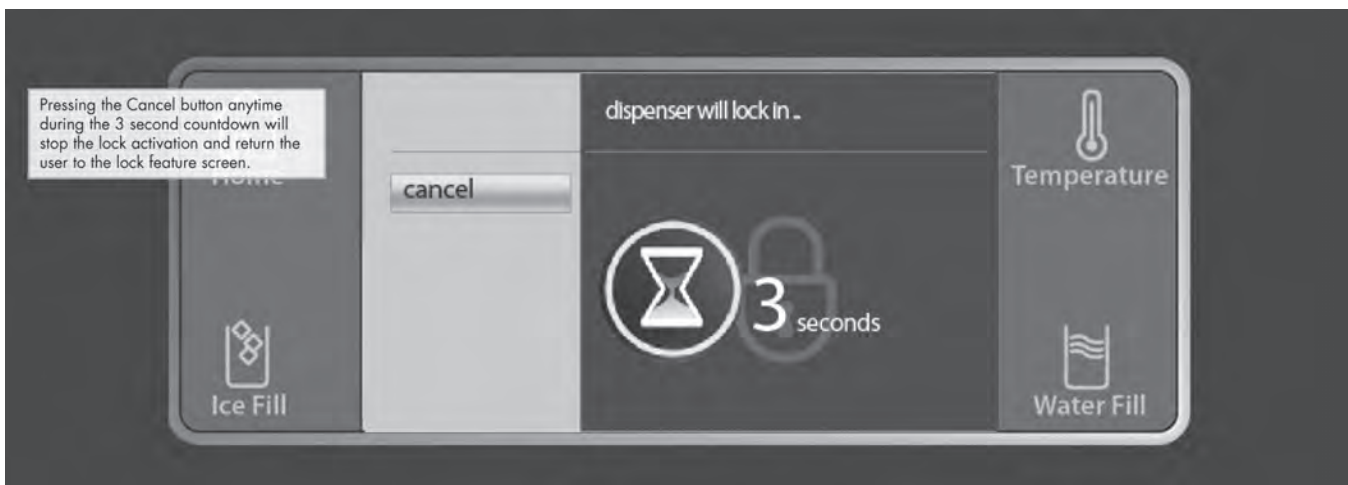


ADVANCED FEATURES SCREEN

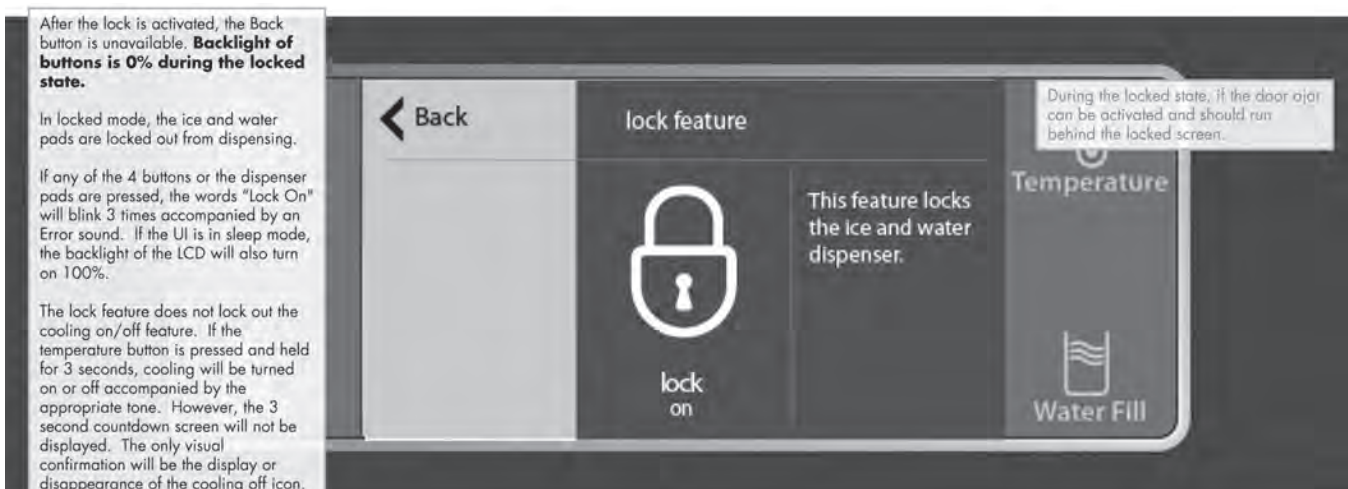
Dispenser Lock / Lock Confirmation State



Dispenser Lock / Lock Countdown State

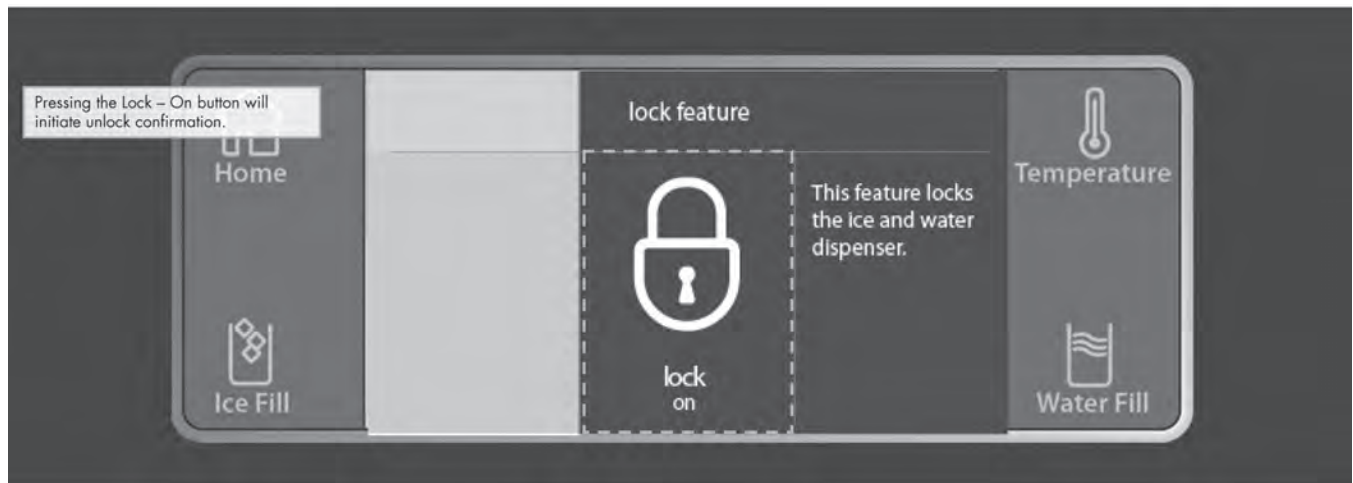


Dispenser Lock / Lock Complete State

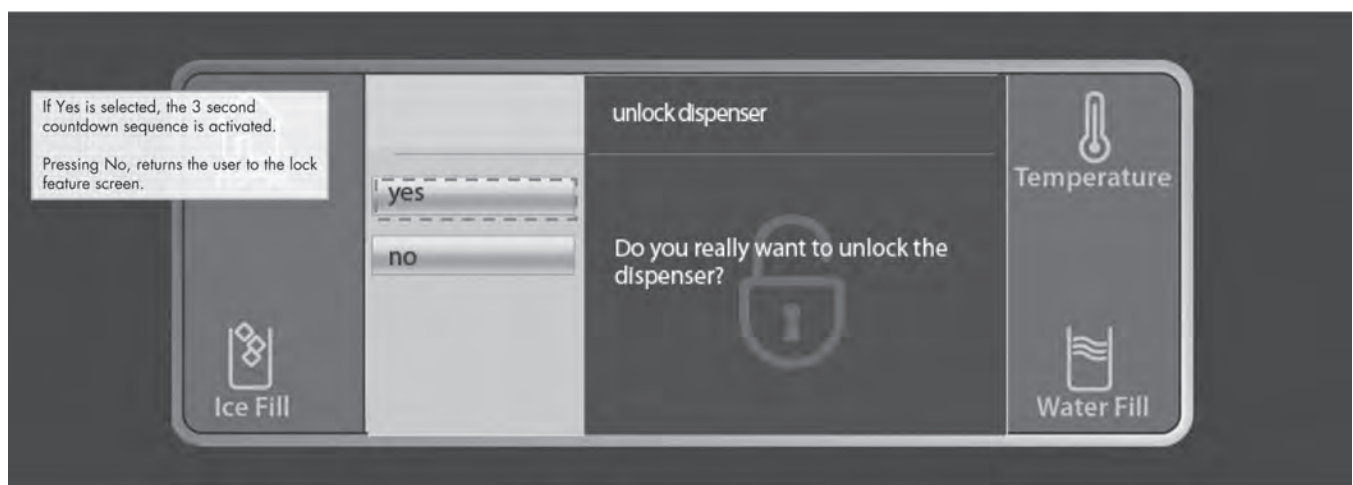


ADVANCED FEATURES SCREEN (continued)

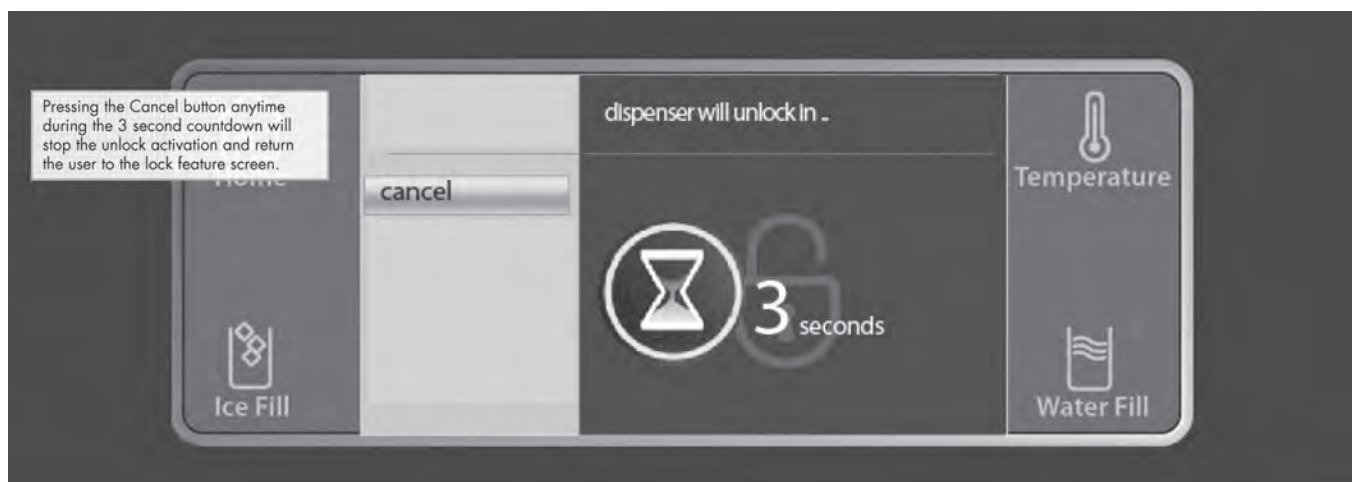
Dispenser Unlock / Locked State



Dispenser Unlock / Unlock Confirmation State

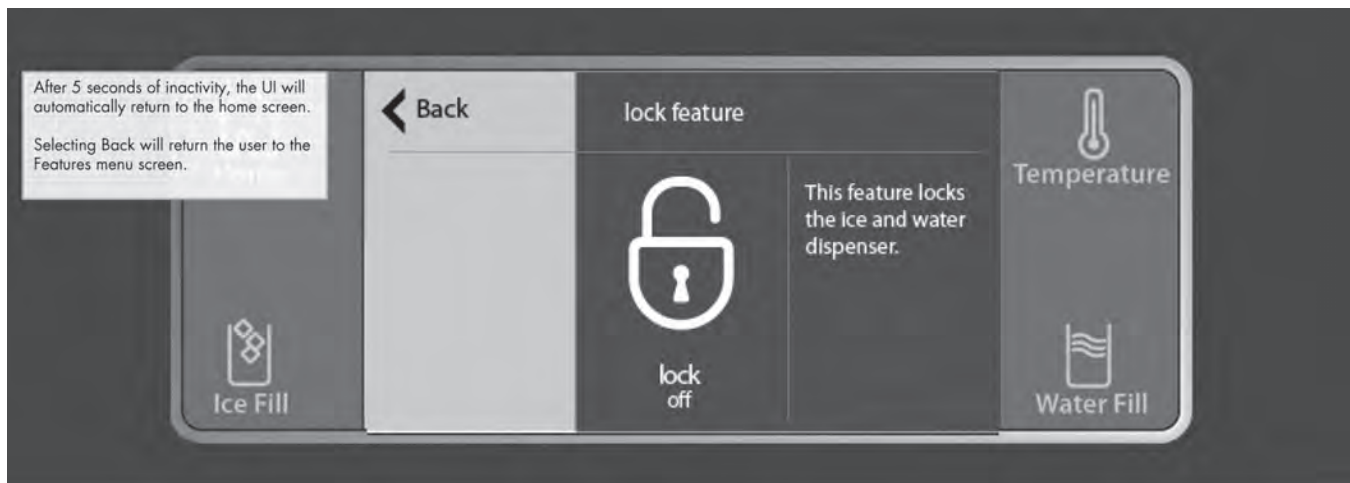


Dispenser Unlock / Unlock Countdown State

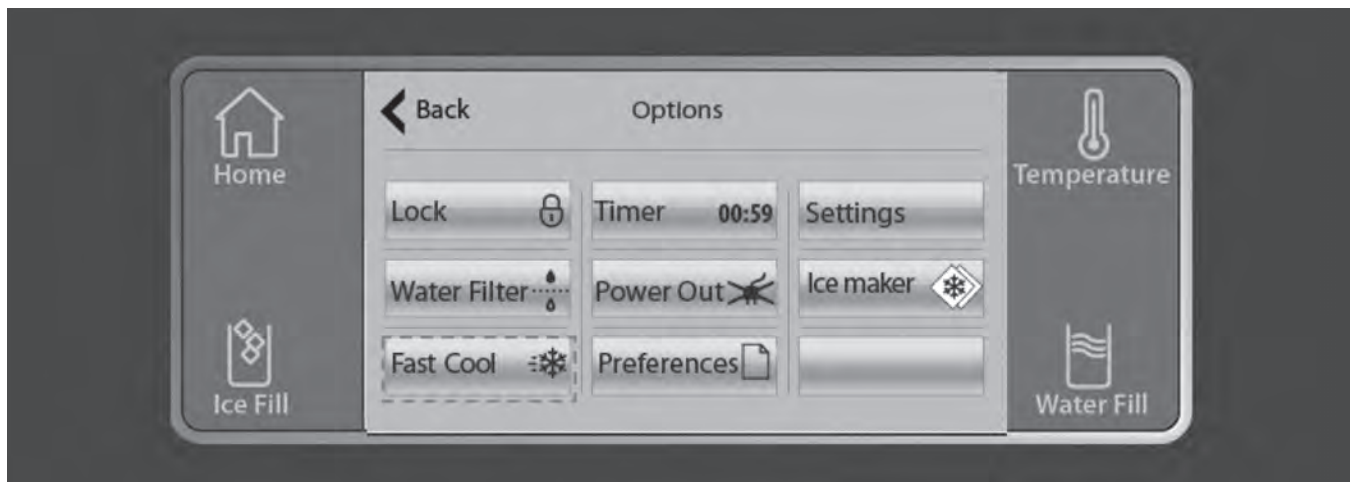


ADVANCED FEATURES SCREEN (continued)

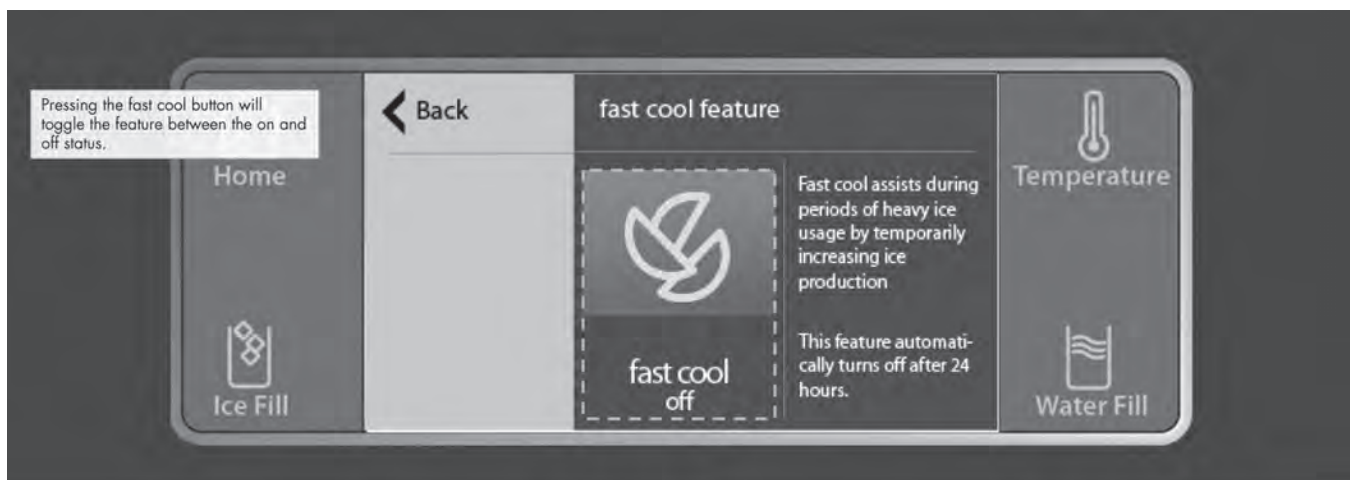
Dispenser Unlock / Unlock Complete State



Features / Features Menu State

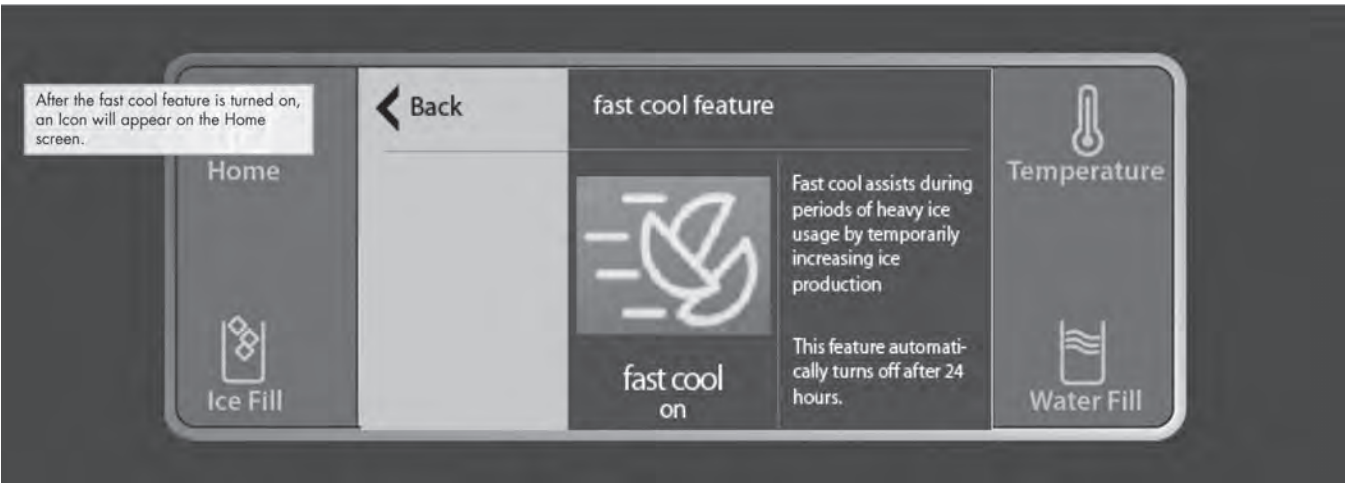


Fast cool Setup / Fast cool Off State



ADVANCED FEATURES SCREEN (continued)

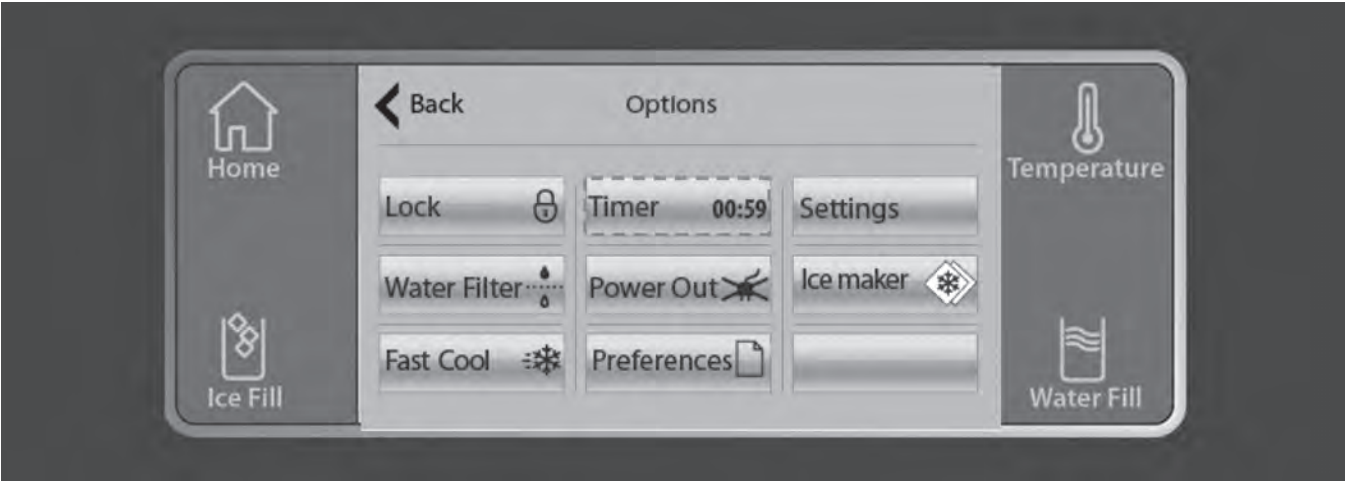
Fast cool Setup / Fast cool Off State



Fast cool Indicator / Fast cool Indicator On State

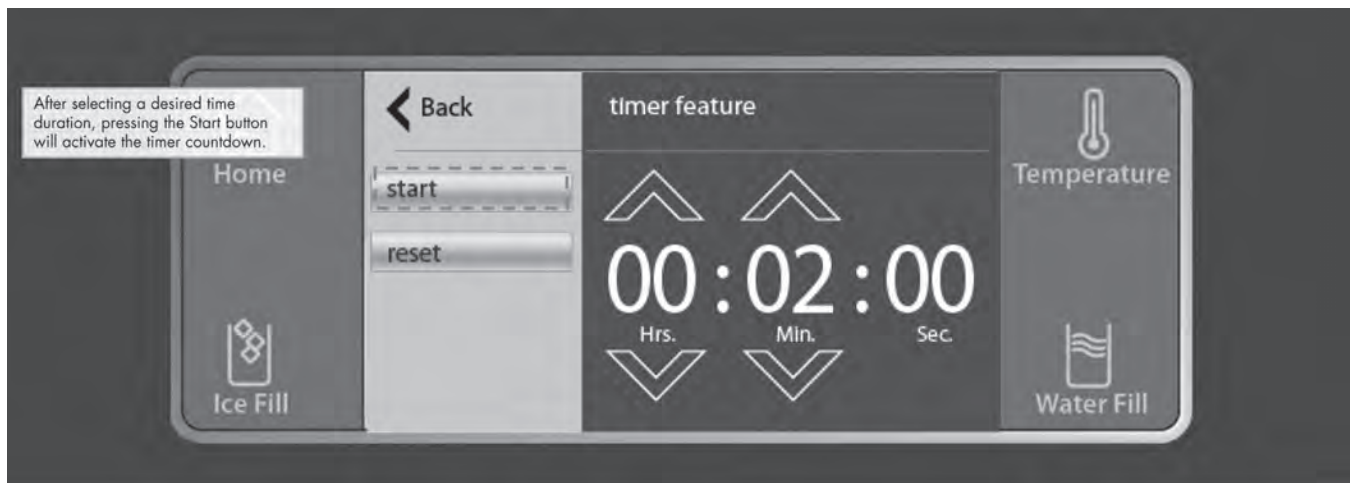


Features / Features Menu State

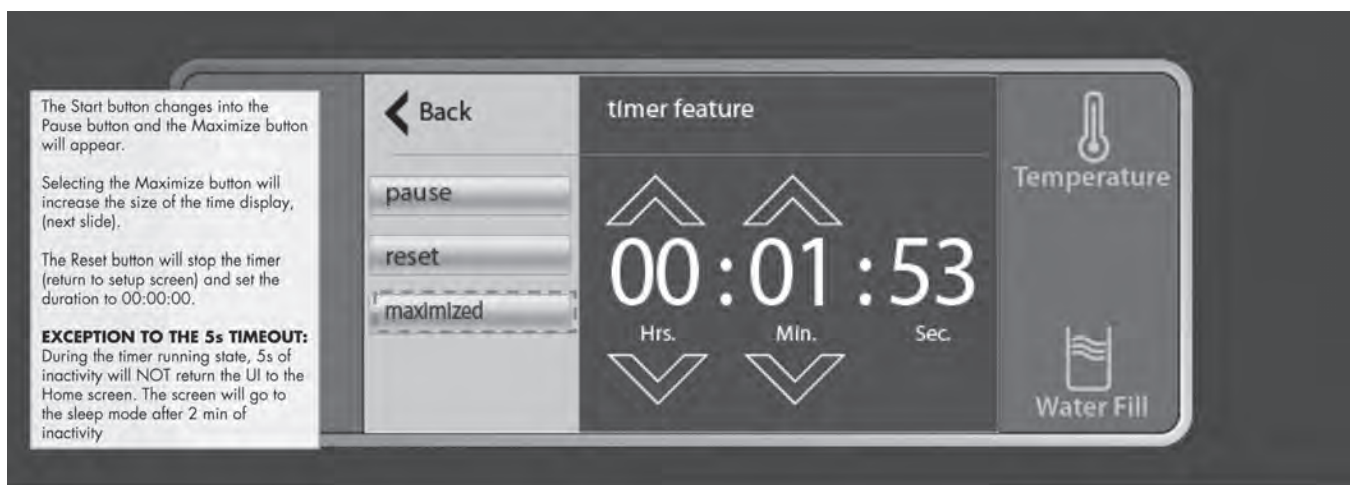


ADVANCED FEATURES SCREEN (continued)

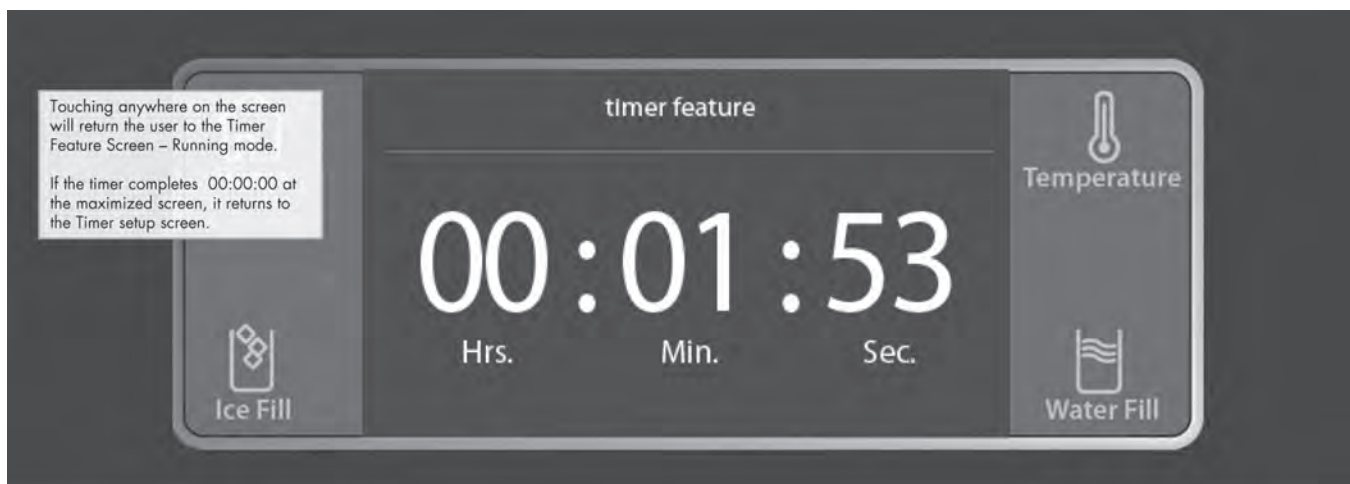
Timer / Timer Setup State



Timer / Timer Running State

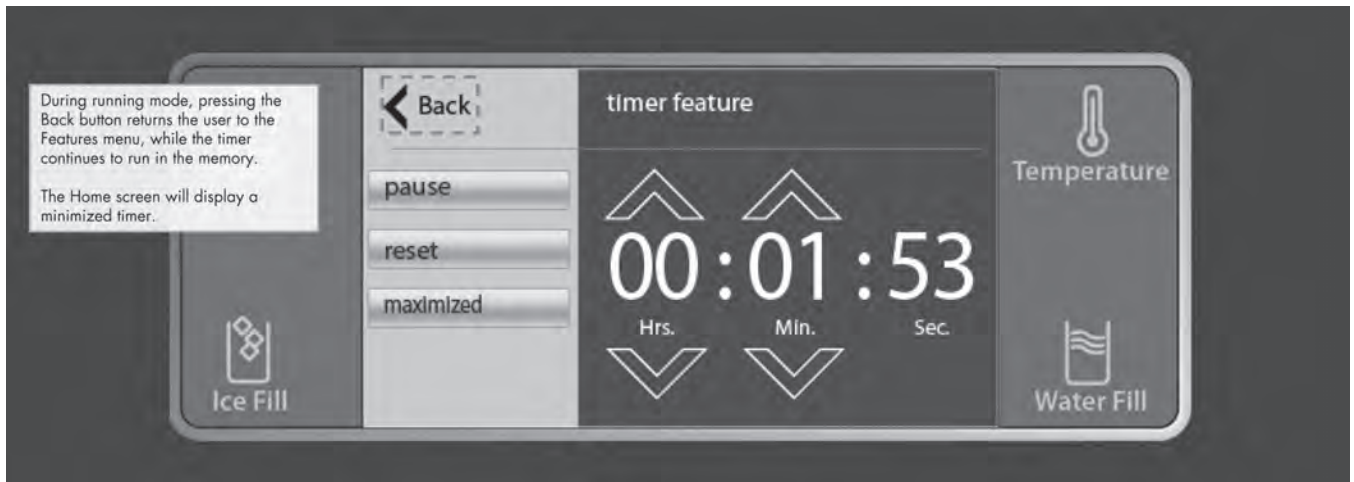


Timer / Timer Running Maximized State

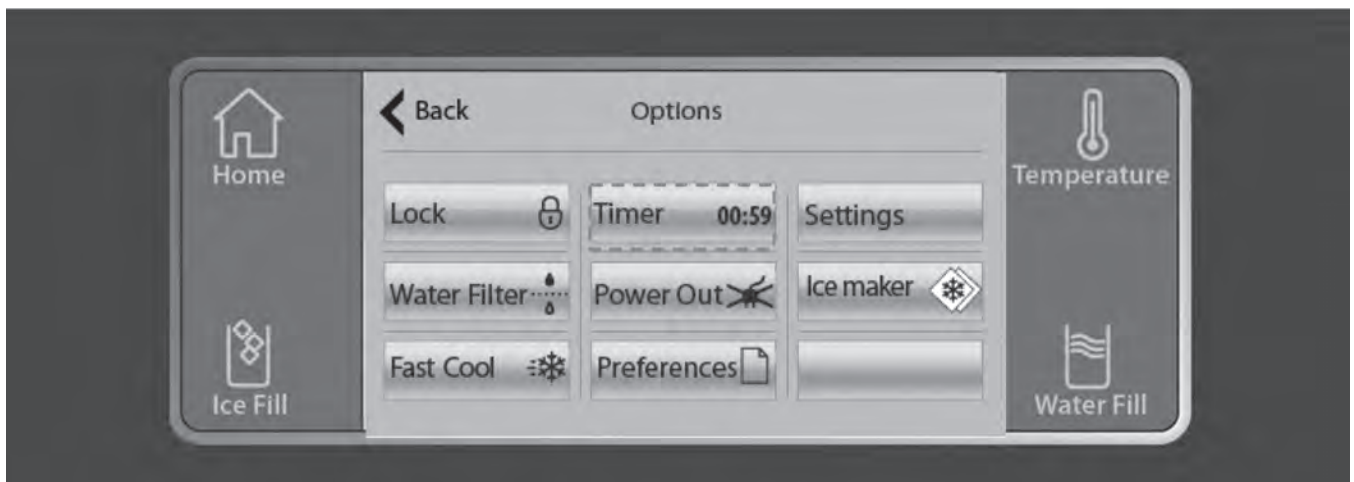


ADVANCED FEATURES SCREEN (continued)

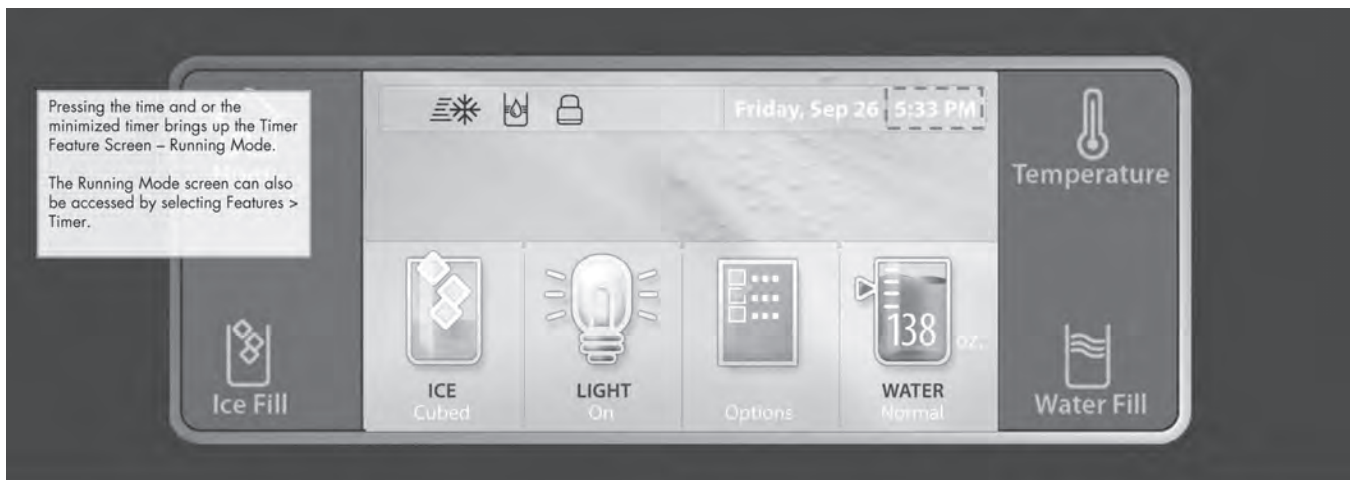
Timer / Timer Running State



Timer / Timer Running in Memory State

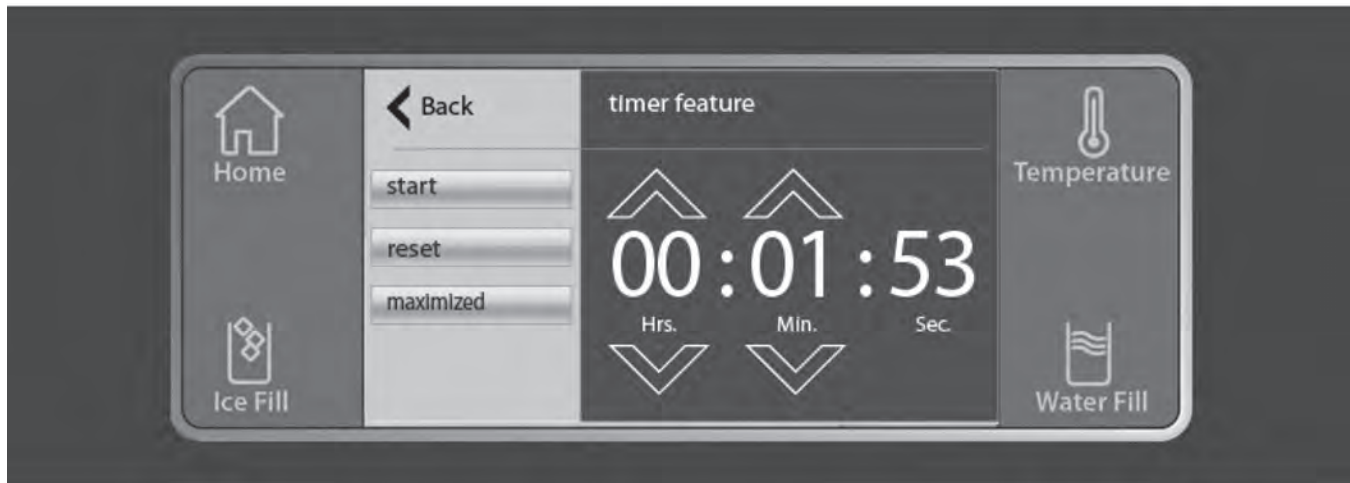


Timer / Timer Running Minimized State in Home Screen

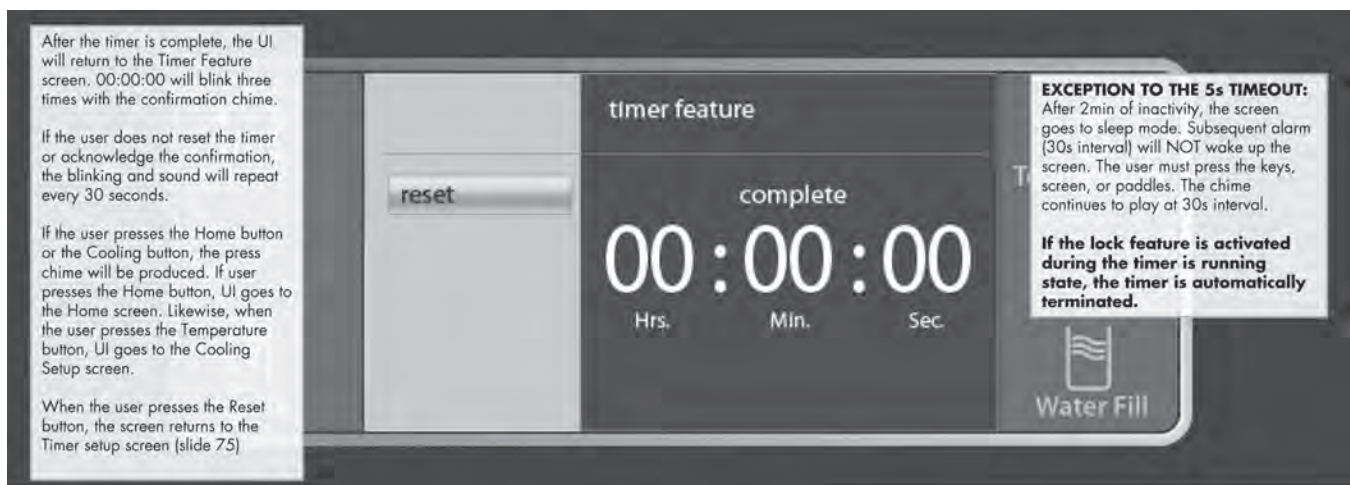


ADVANCED FEATURES SCREEN (continued)

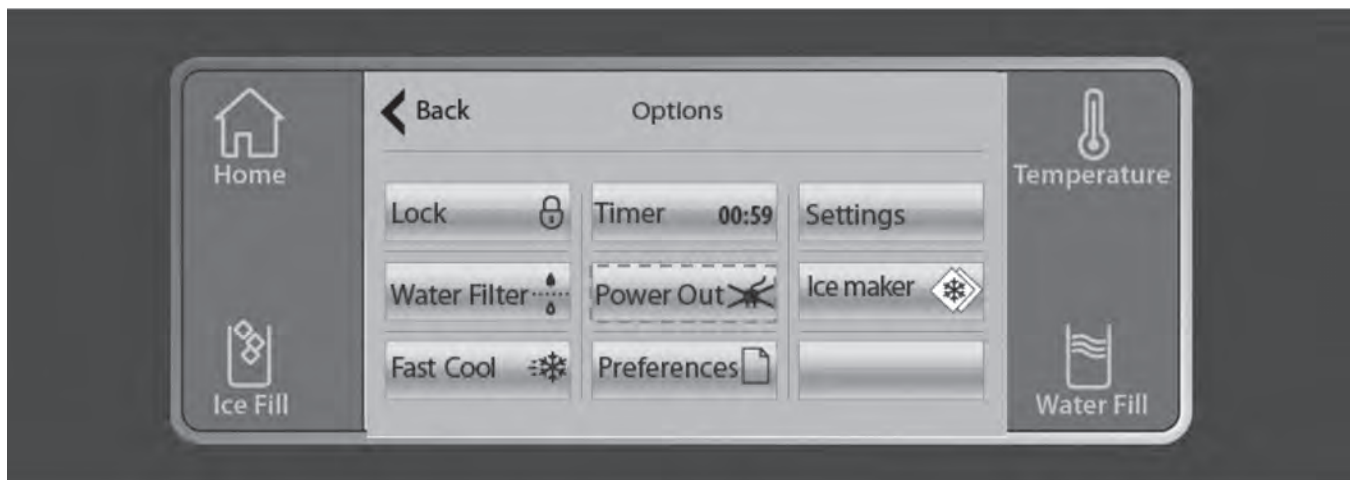
Timer / Timer Running State



Timer / Timer Complete State

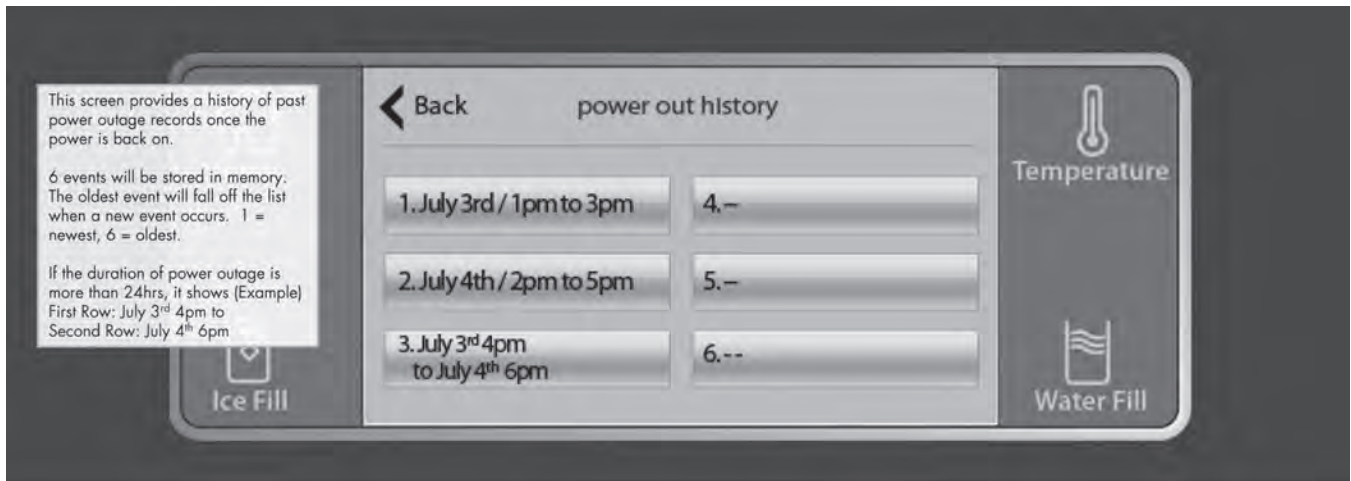


Options / Options Menu State

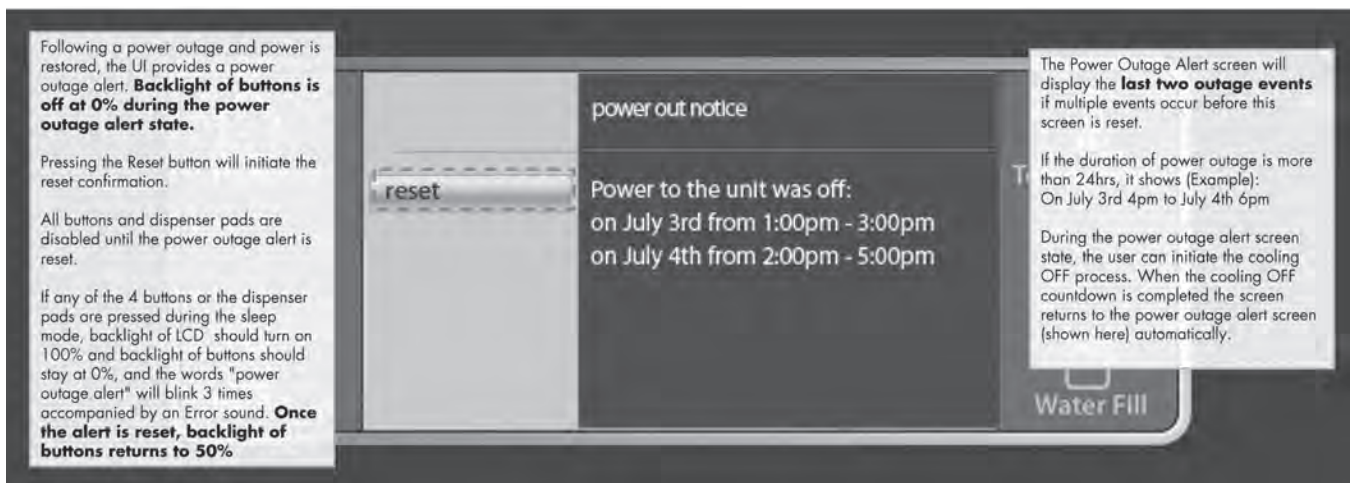


ADVANCED FEATURES SCREEN (continued)

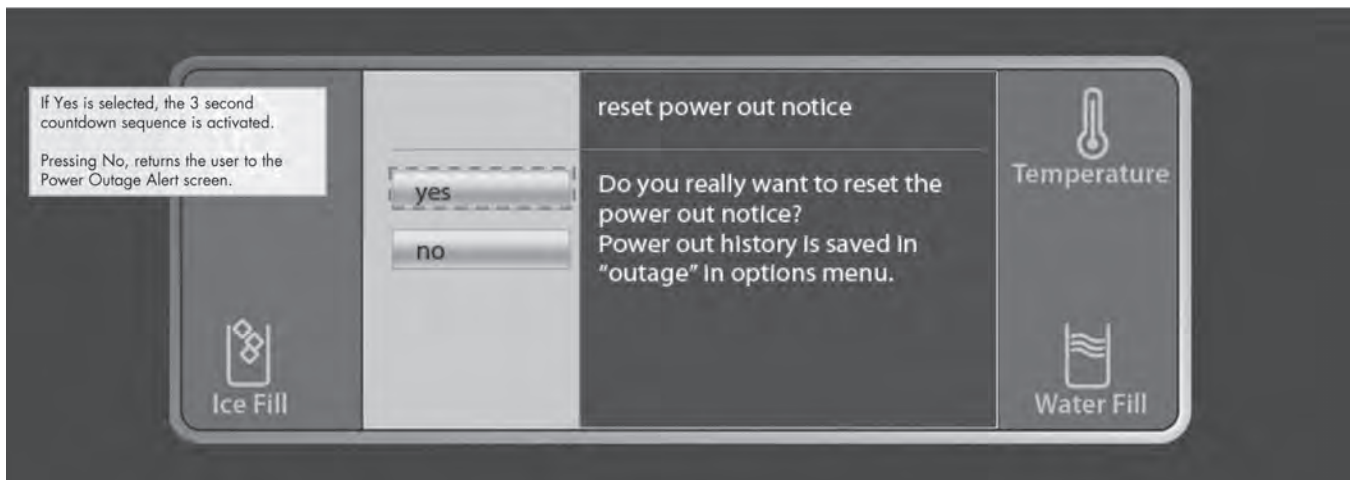
Power Out History / Power Out History View State



Power Out Alert / Power Out Alert State

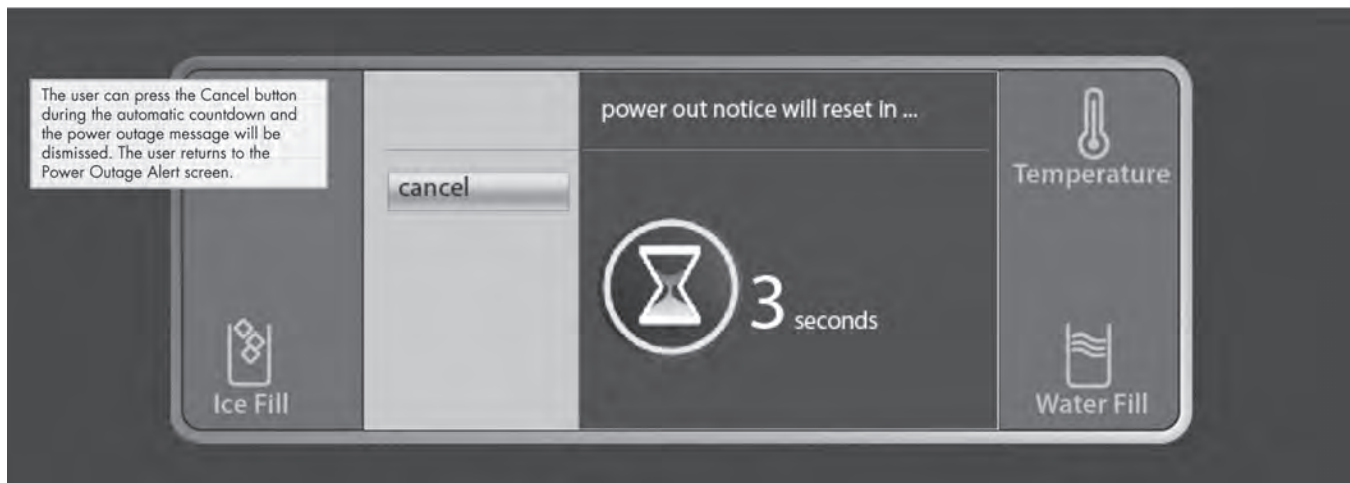


Power Outage Alert / Power Outage Alert Confirmation State



ADVANCED FEATURES SCREEN (continued)

Power Out Alert / Power Out Alert Countdown State

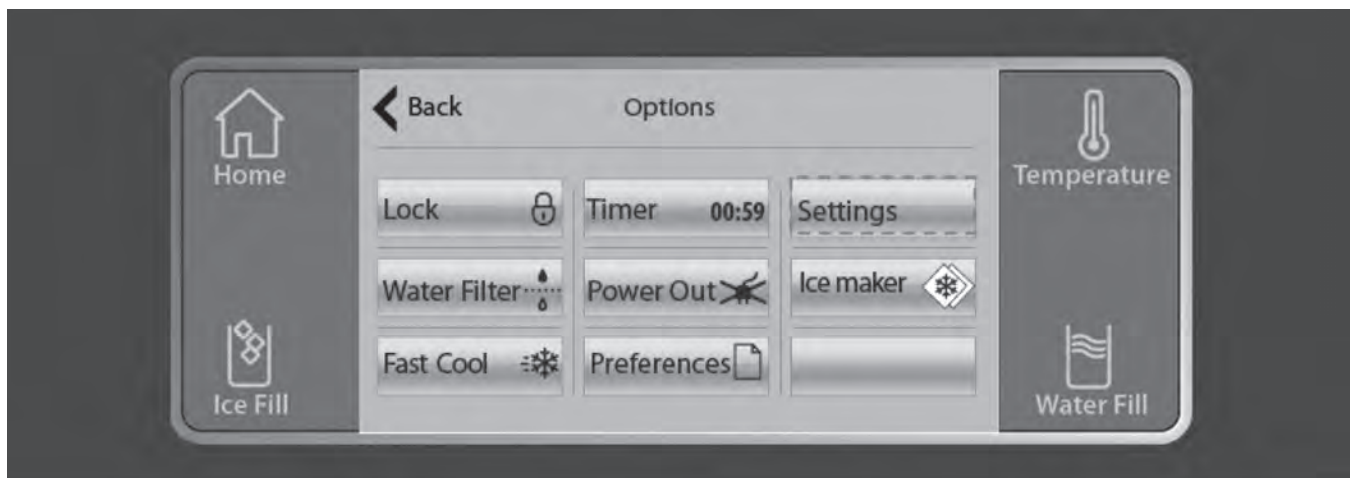


ADVANCED FEATURES SCREEN – SETTINGS & PREFERENCES

Home State

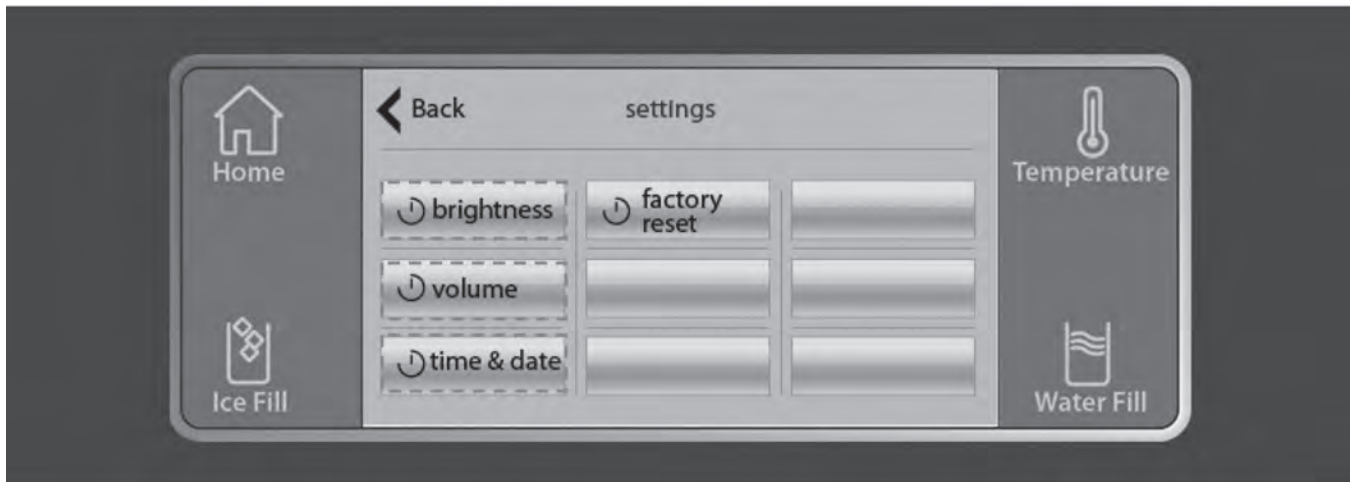


Options / Options Menu State

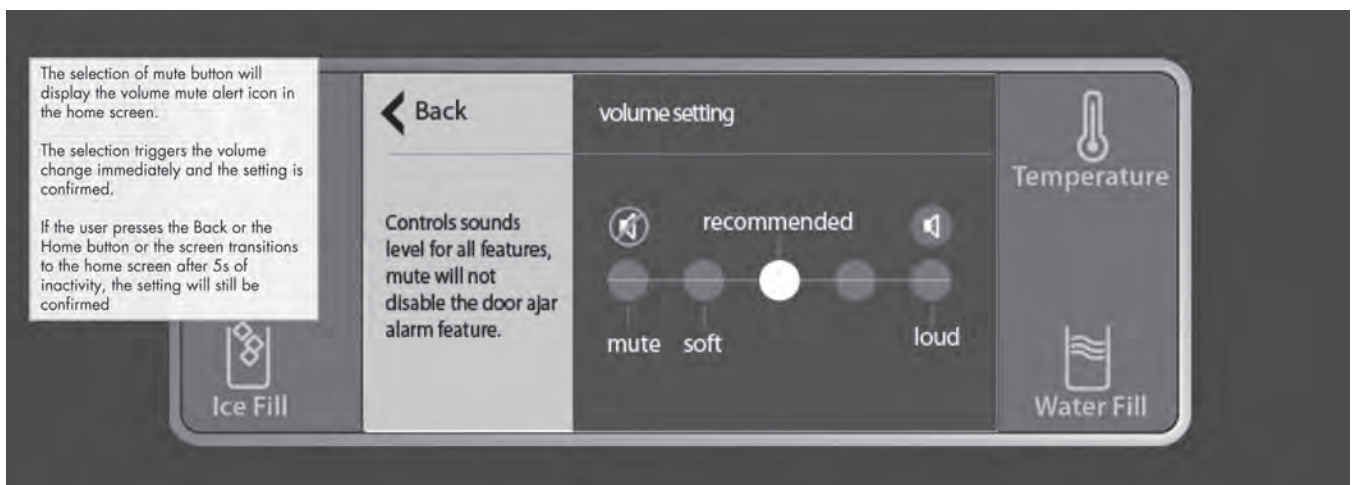


ADVANCED FEATURES SCREEN – SETTINGS & PREFERENCES (con't)

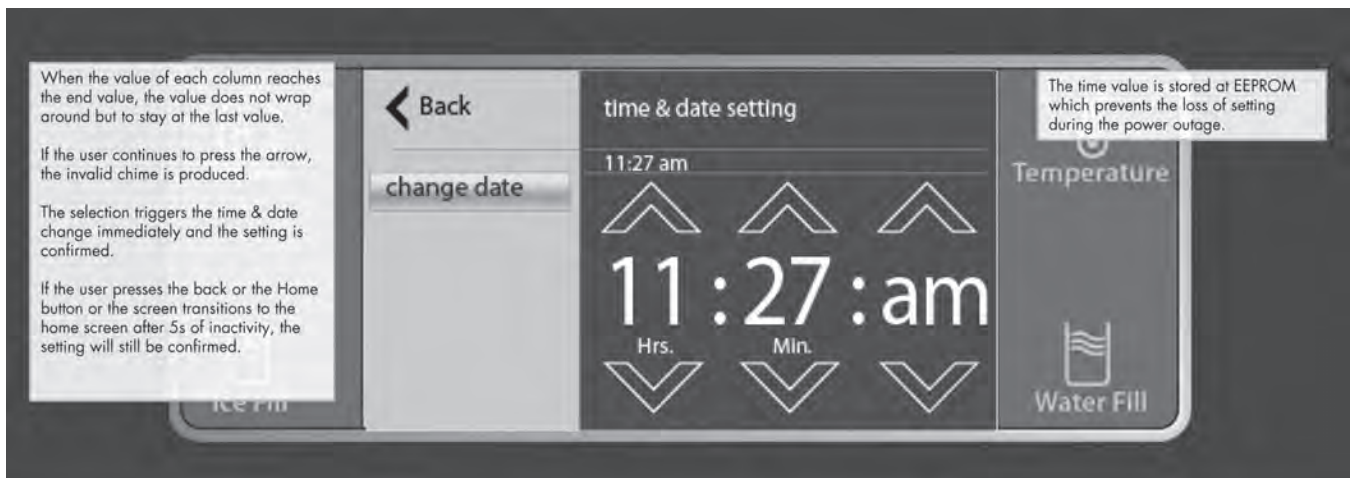
Brightness Setting / Brightness Setup State



Volume Setting / Volume Setup State

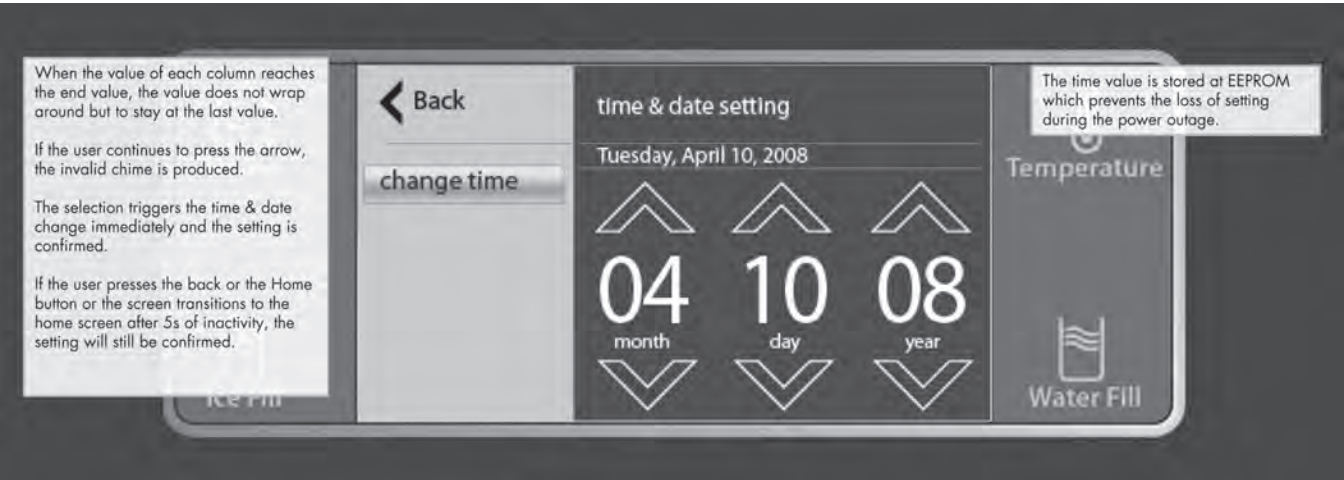


Time & Date Setting / Time & Date Setup State

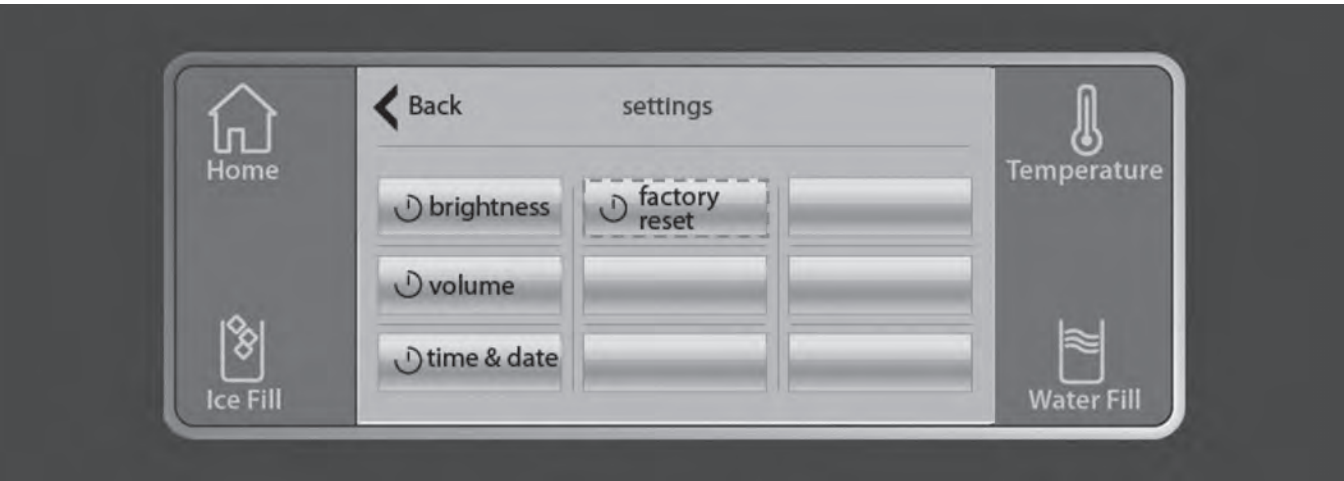


ADVANCED FEATURES SCREEN – SETTINGS & PREFERENCES (con't)

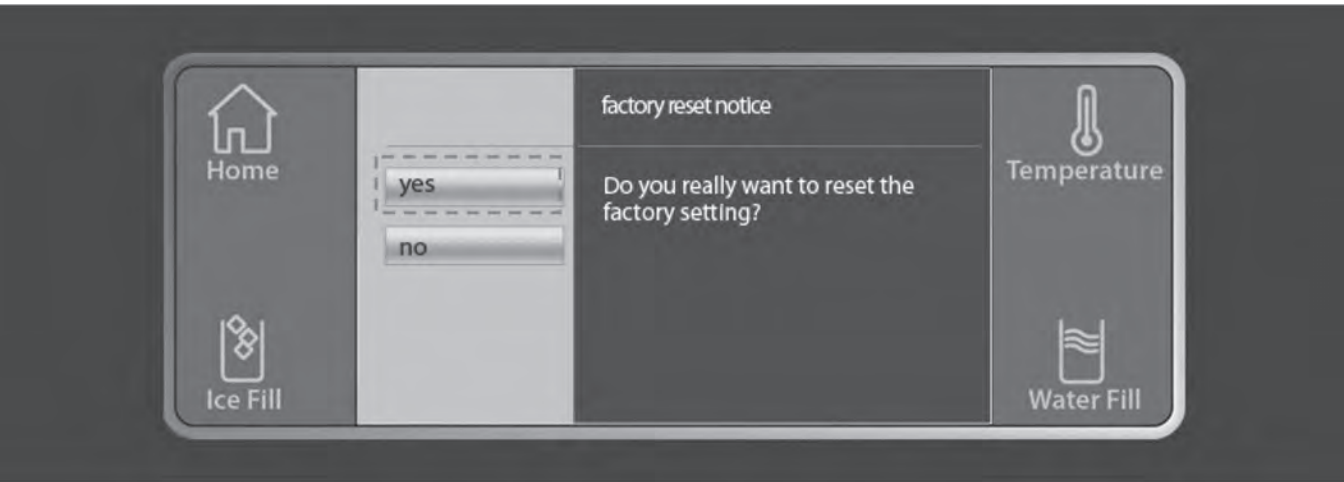
Time & Date Setting / Time & Date Setup State



Settings / Settings Menu State

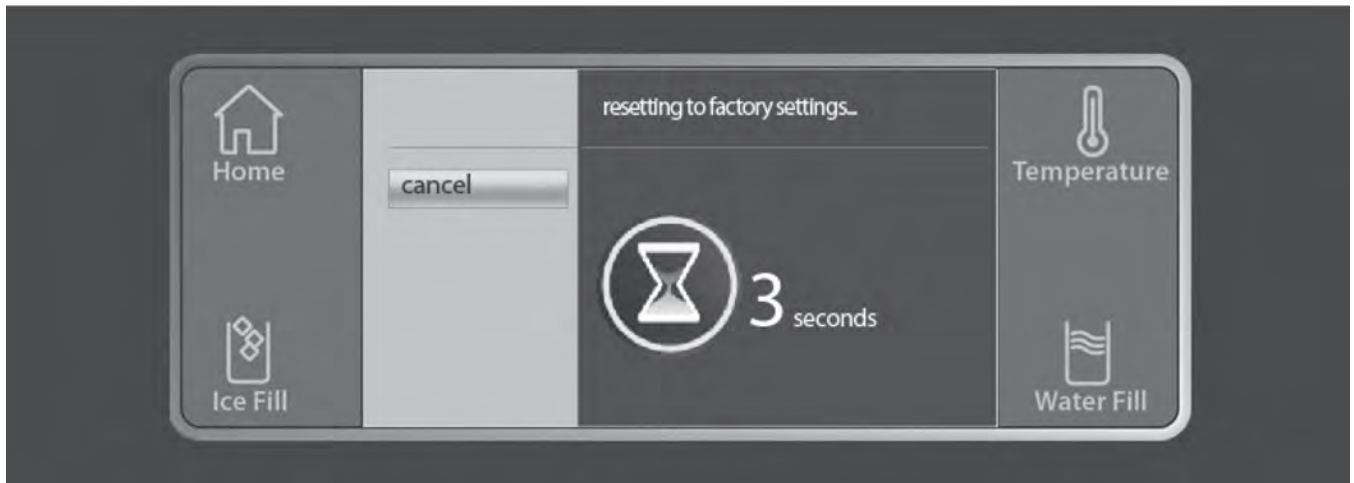


Factory reset Setting / Factory reset Setup State

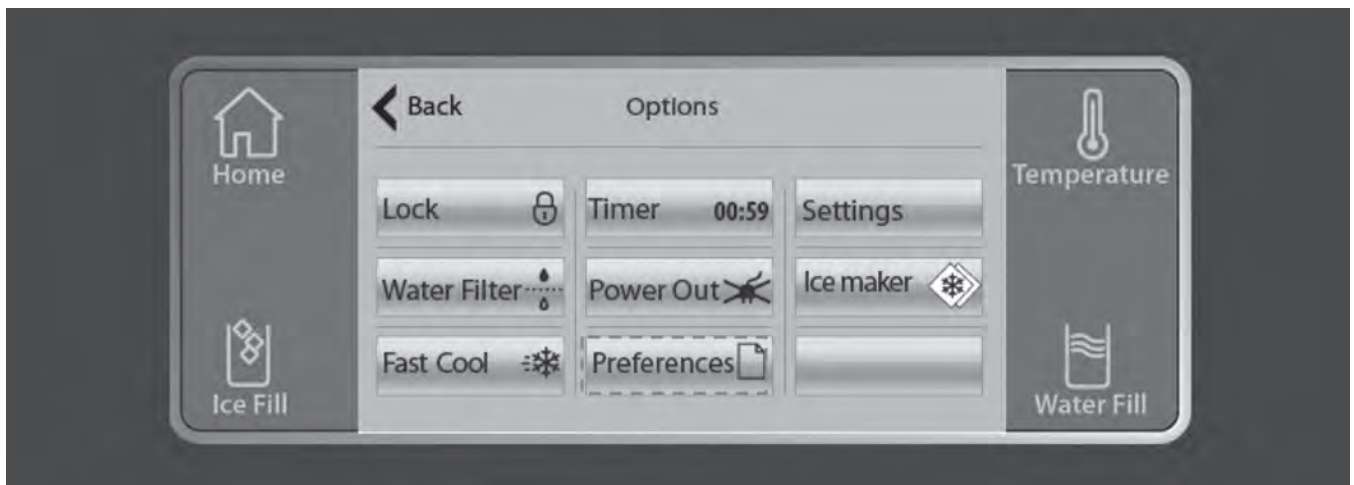


ADVANCED FEATURES SCREEN – SETTINGS & PREFERENCES (con't)

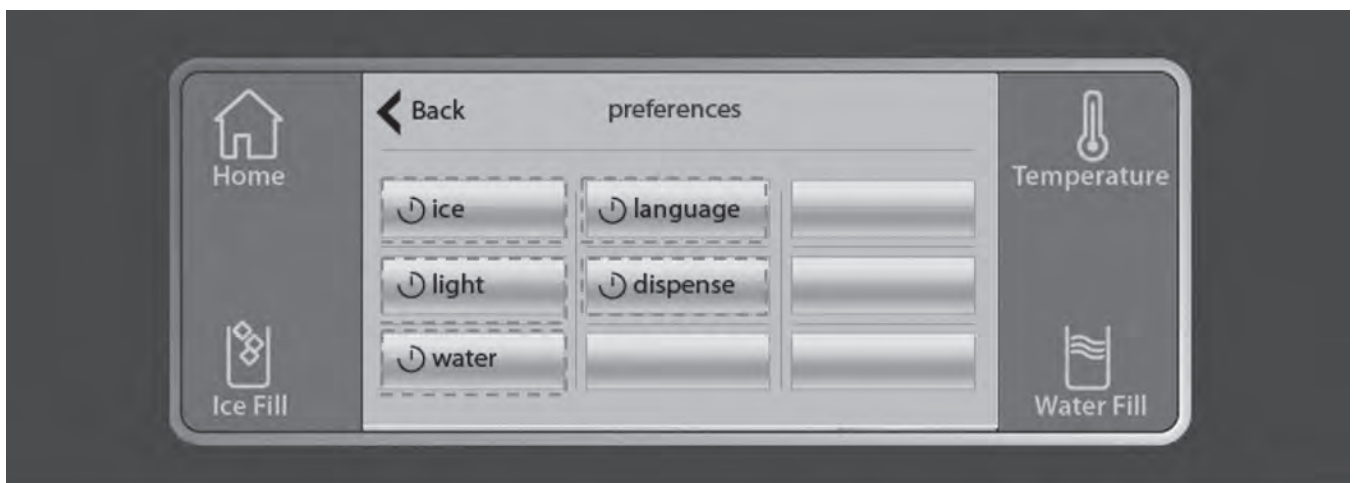
Factory reset Setting / Factory reset Setup State



Features / Features Menu State

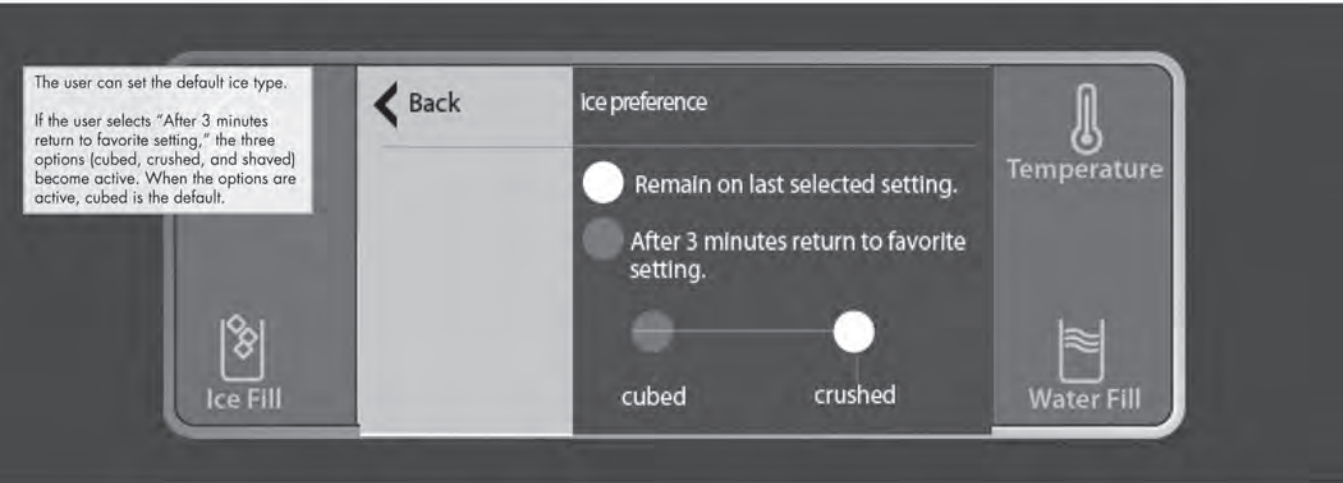


Preferences / Preferences Menu State

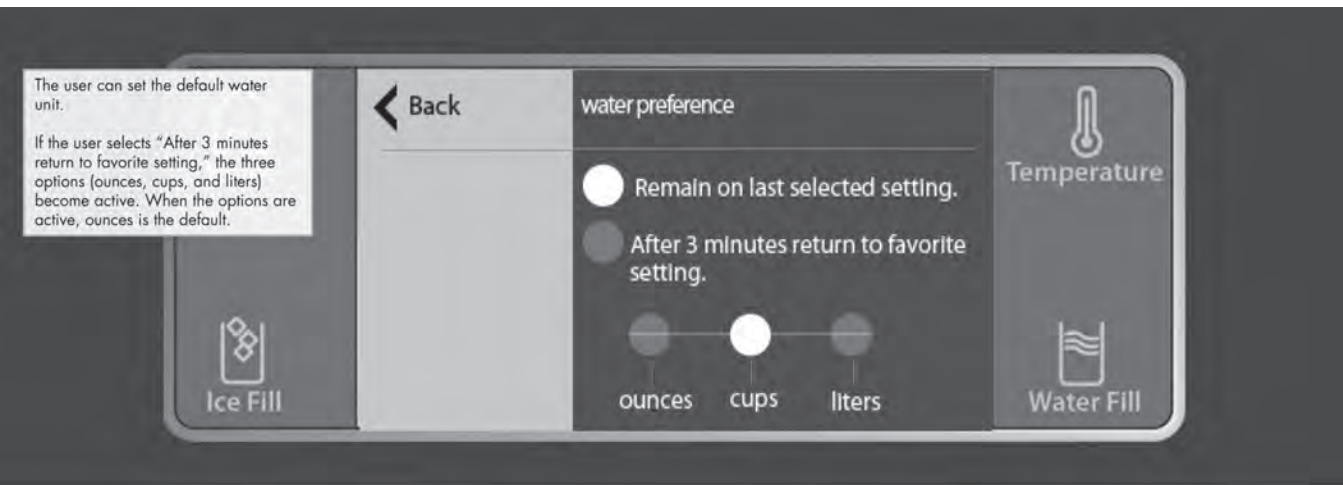


ADVANCED FEATURES SCREEN – SETTINGS & PREFERENCES (con't)

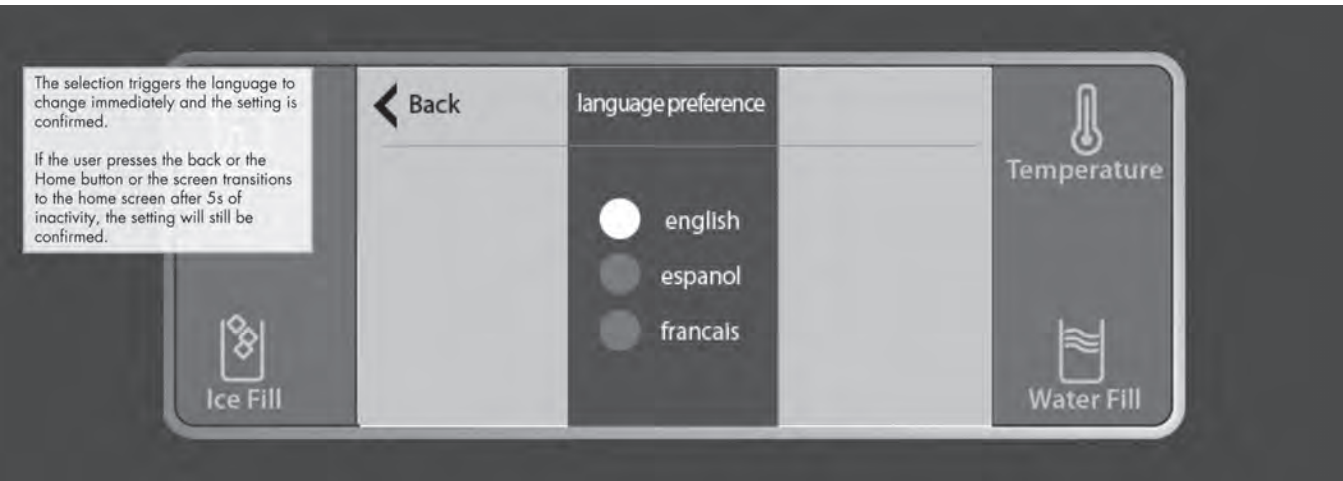
Ice Preference / Ice Preference Setup State



Water Preference / Water Preference Setup State

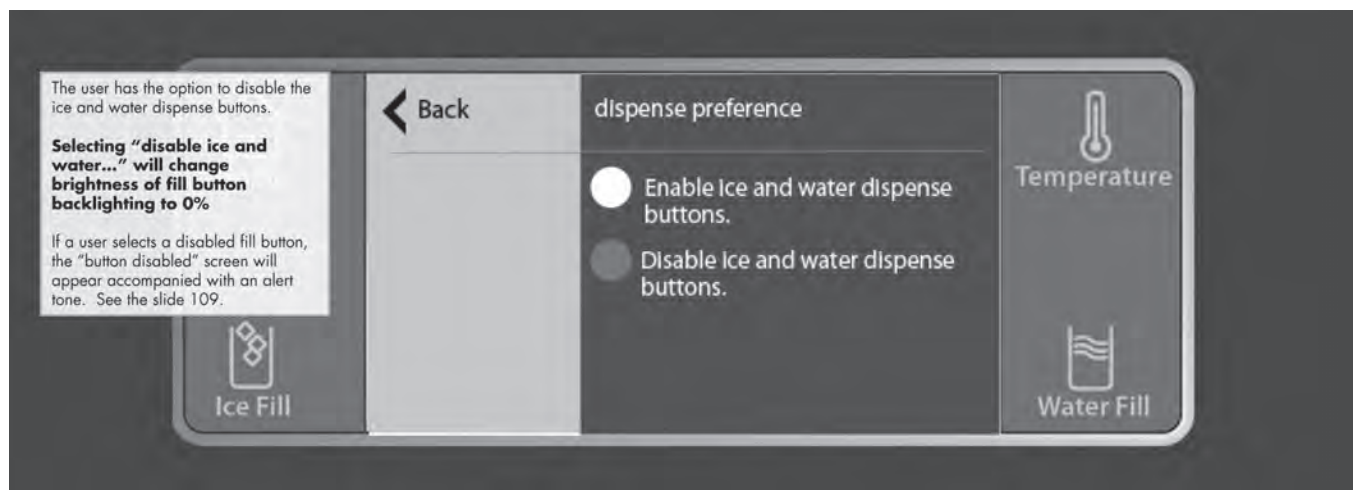


Language Preference / Language Preference Setup State



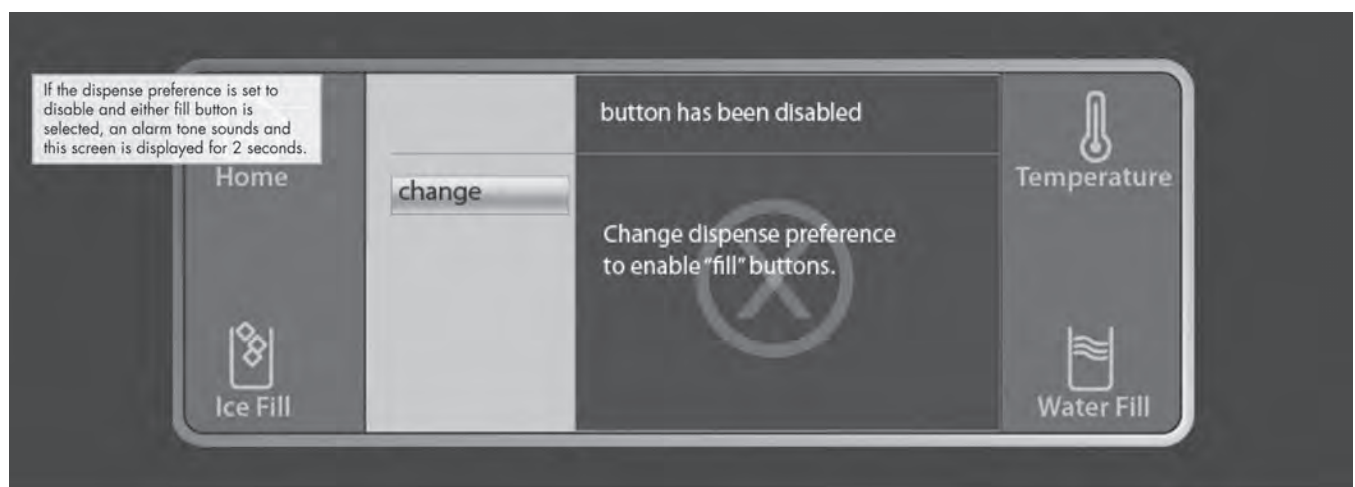
ADVANCED FEATURES SCREEN – SETTINGS & PREFERENCES (con't)

Dispense Preference / Dispense Preference Setup State



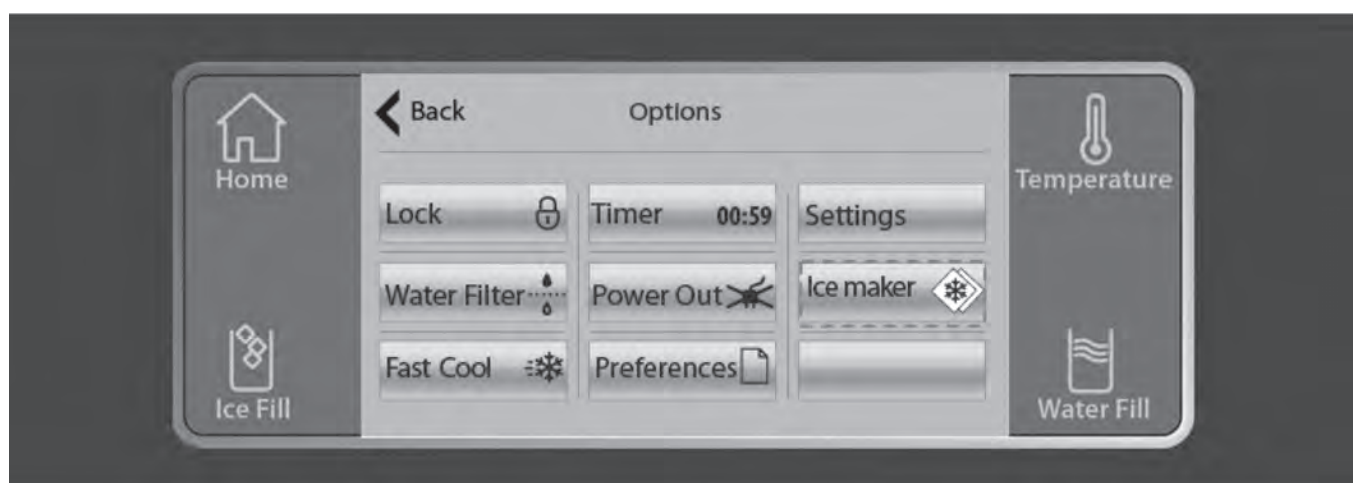
TEMPORARY ALERT

Temporary Alert for Disabled Buttons / Temporary Alert State



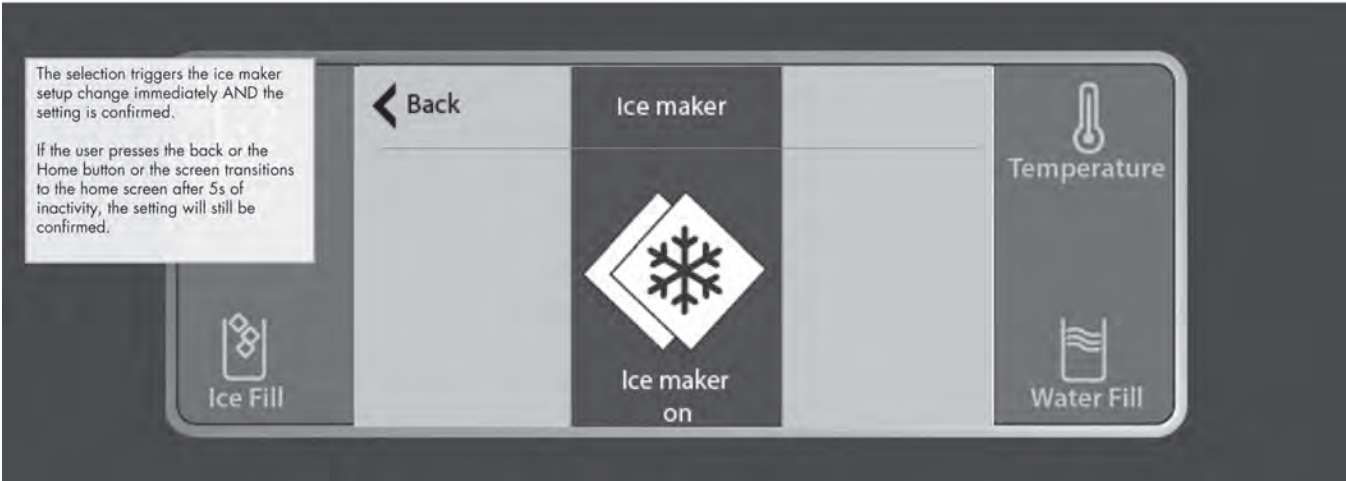
ADVANCED FEATURES SCREEN – ICE MAKER

Options / Options Menu State



ADVANCED FEATURES SCREEN – ICE MAKER (continued)

Ice maker Setting / Ice maker Setup State

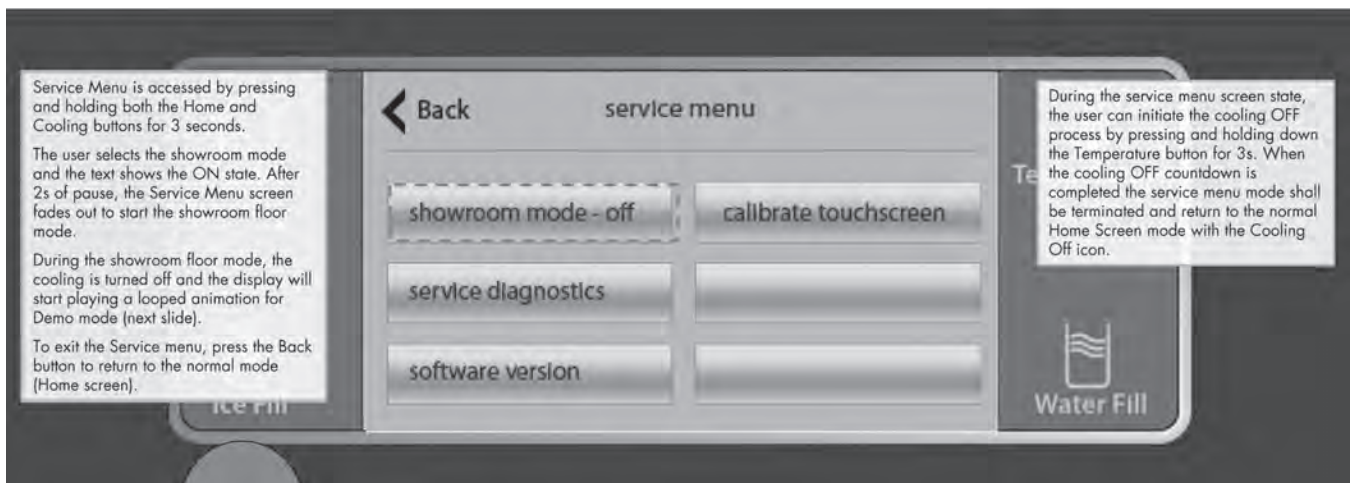


Ice maker Setting / Ice maker Setup State

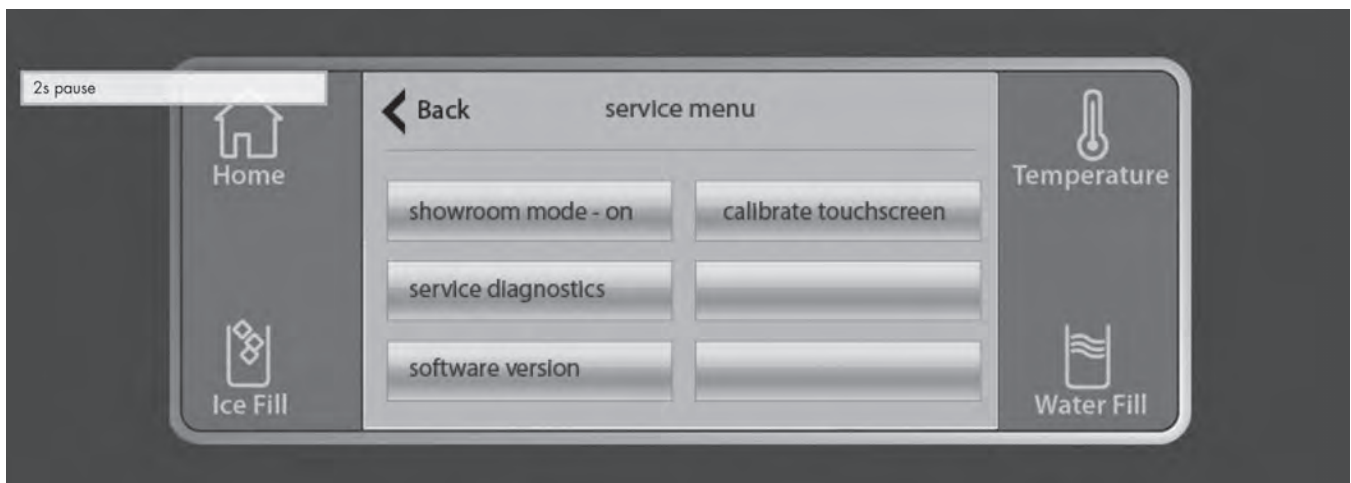


SHOWROOM FLOOR MODE, DEMO MODE, SERVICE DIAGNOSTICS MODE

Service Mode / Service Menu State



Service Mode / Service Menu State

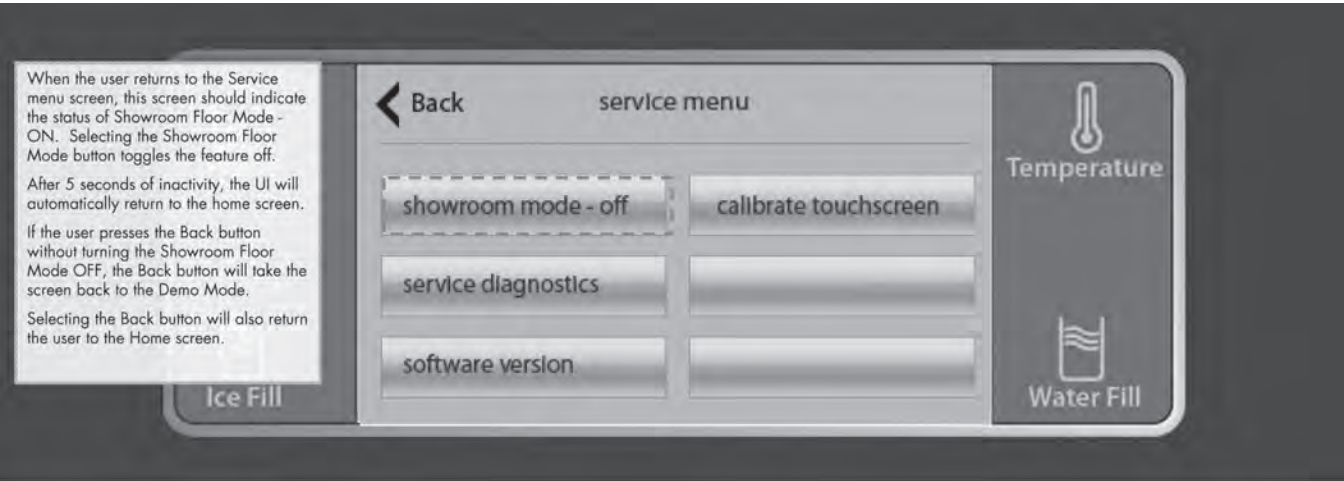


Service Mode / Demo Mode State

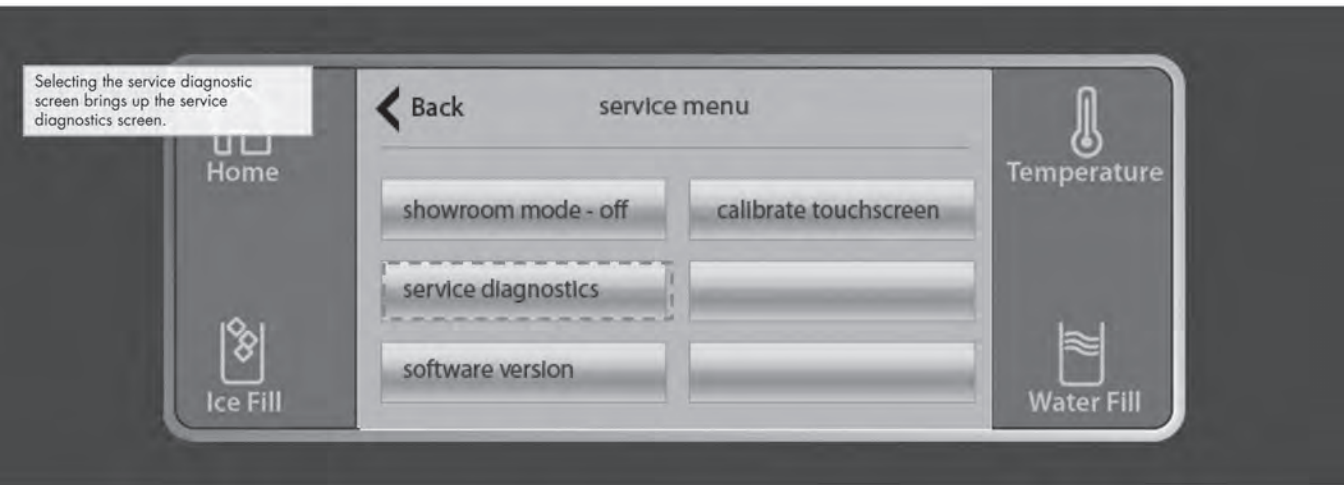


SHOWROOM FLOOR MODE, DEMO MODE, SERVICE DIAGNOSTICS MODE (continued)

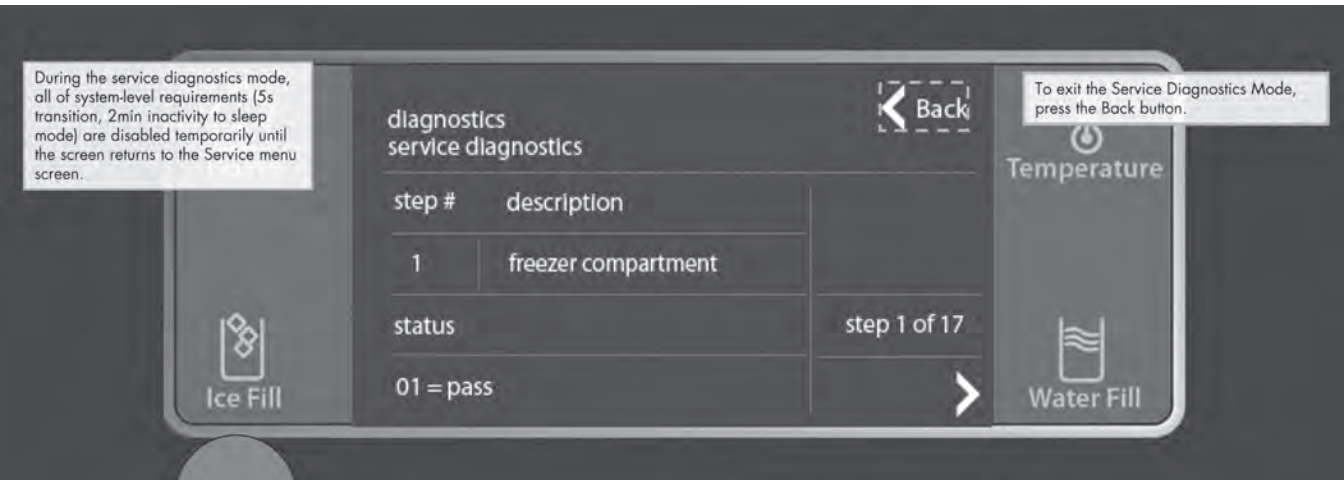
Service Mode / Service Menu State



Service Mode / Service Menu State

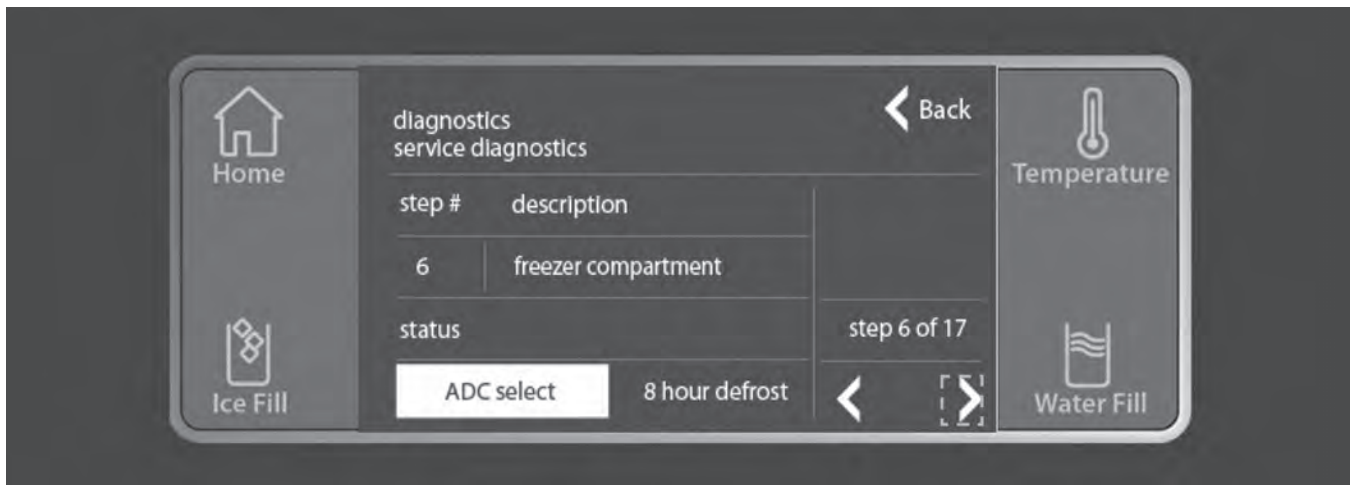


Service Mode / Service Diagnostics State

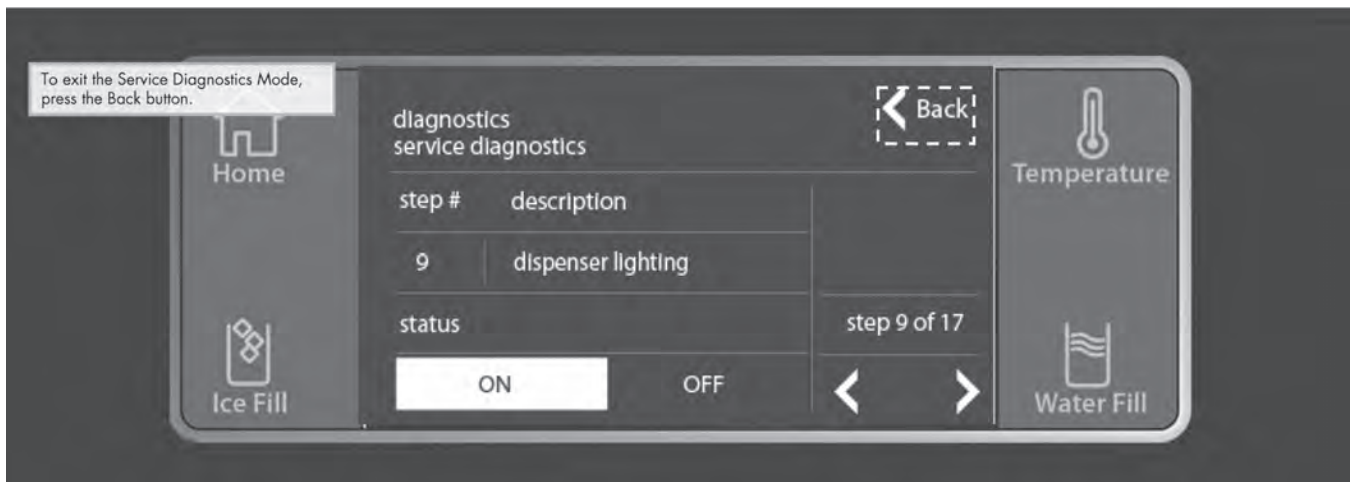


SHOWROOM FLOOR MODE, DEMO MODE, SERVICE DIAGNOSTICS MODE (continued)

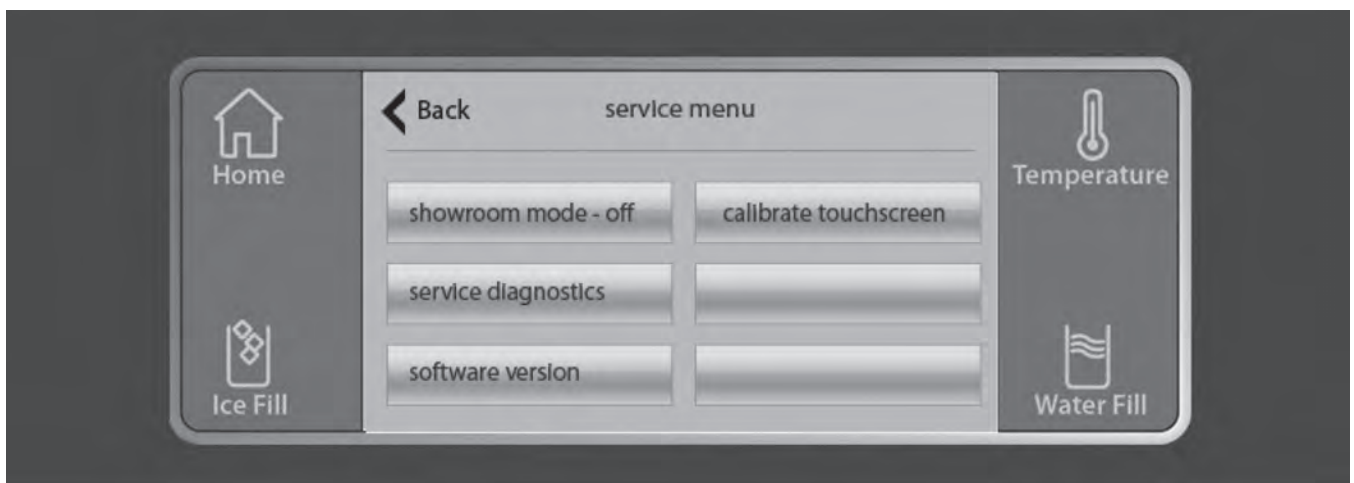
Service Mode / Service Diagnostics State



Service Mode / Service Diagnostics State



Service Mode / Service Menu State

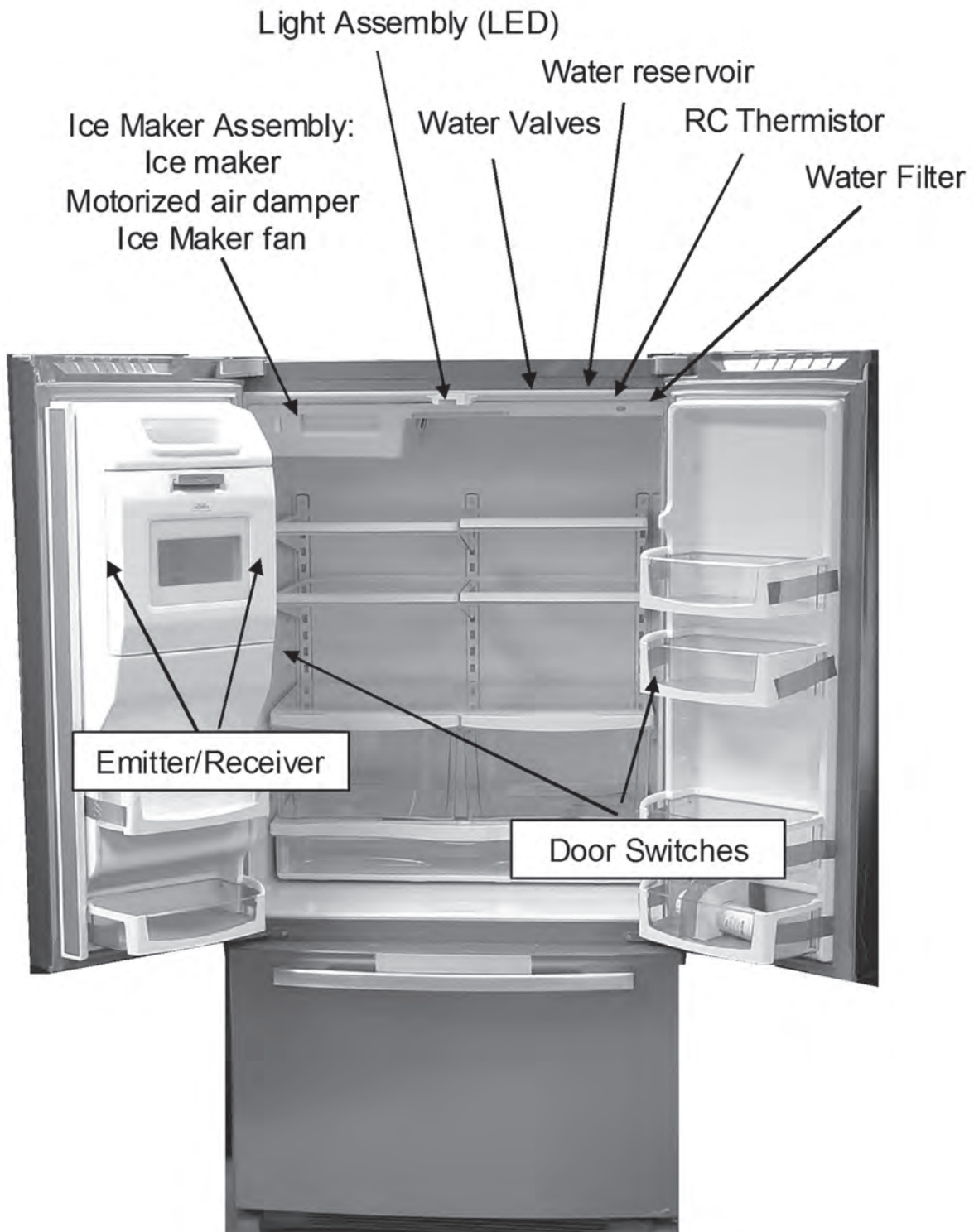


– NOTES –

COMPONENT ACCESS

This section instructs you on how to service each component inside the French Door Bottom-Mount Refrigerator. The components and their locations are shown below.

COMPONENT LOCATIONS



REMOVING THE FACADE

⚠ WARNING



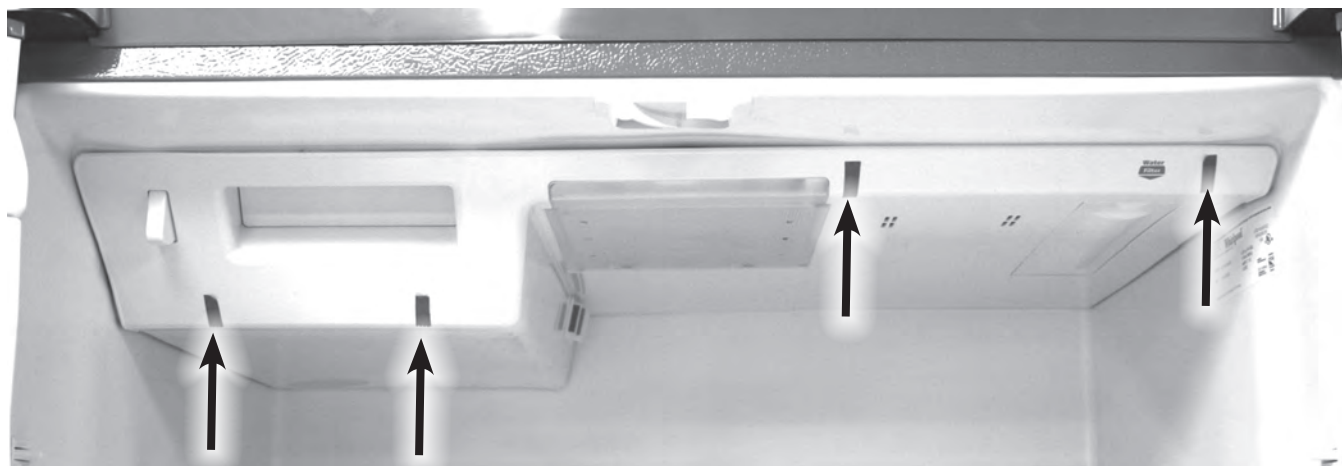
Electrical Shock Hazard

Disconnect power before servicing.

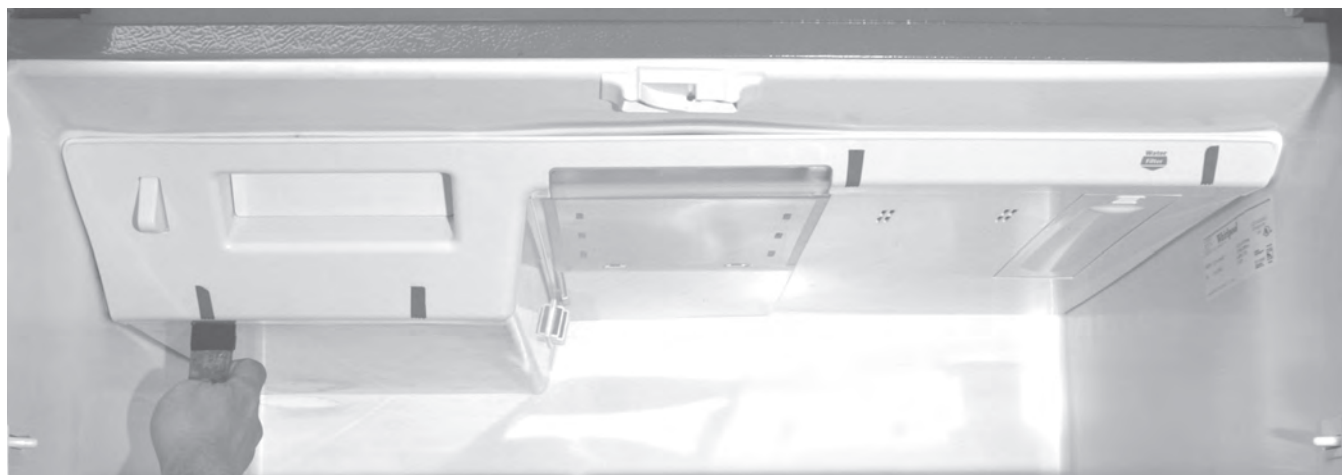
Replace all parts and panels before operating.

Failure to do so can result in death or electrical shock.

1. Unplug refrigerator or disconnect power.
2. Open the refrigerator compartment door.

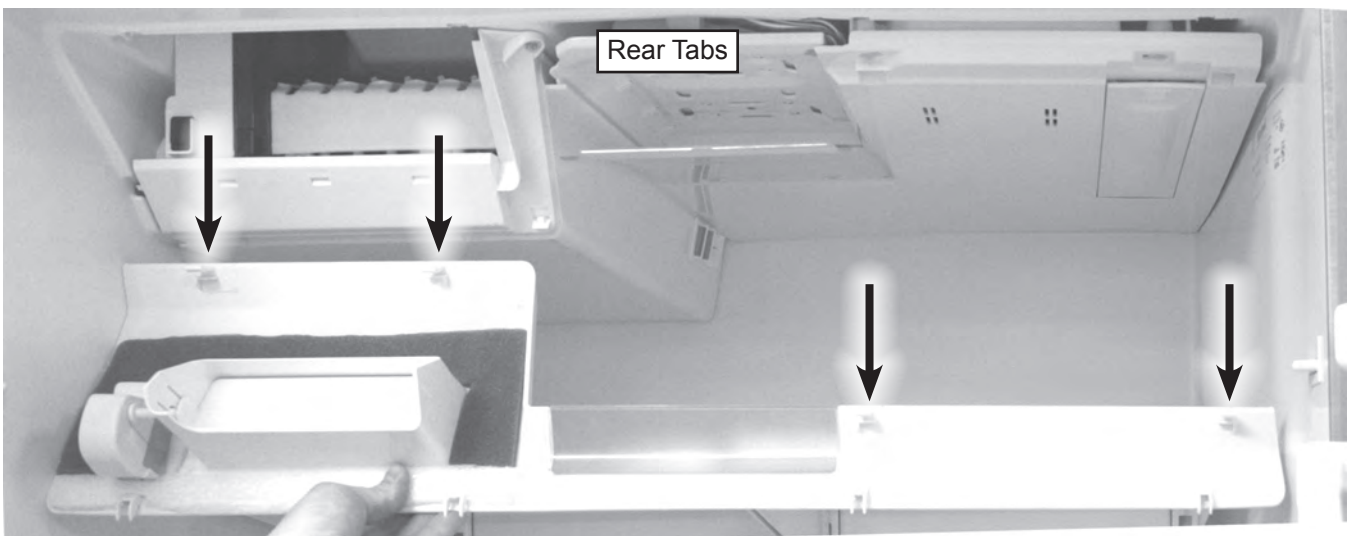
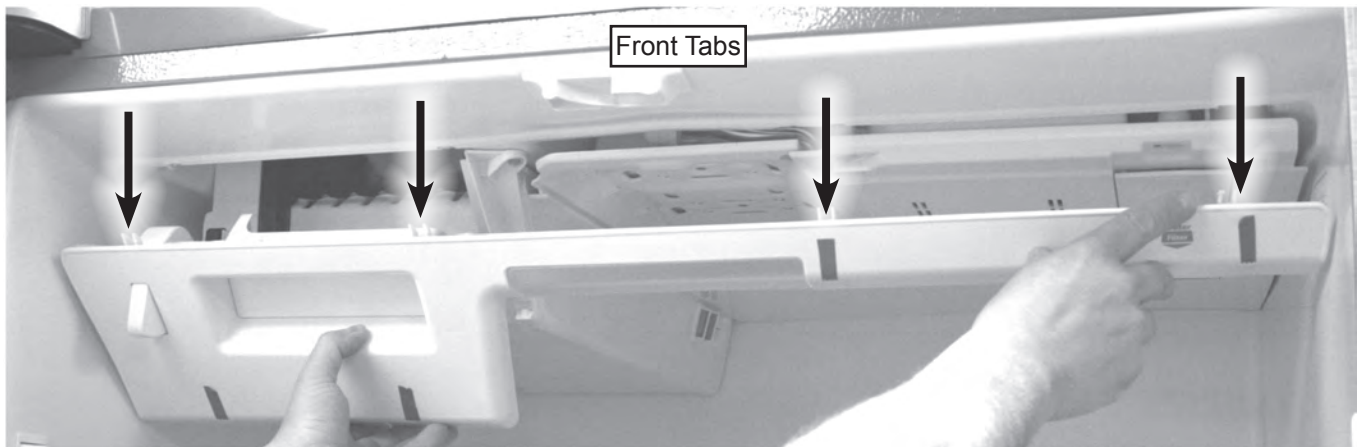


3. Tape indicates where to insert tool to release facade.



4. Use a wide flat blade screwdriver or putty knife to release

REMOVING THE FACADE (continued)



REMOVING THE ICE MAKER ASSEMBLY

⚠ WARNING



Electrical Shock Hazard

**Disconnect power before servicing.
Replace all parts and panels before
operating.**

**Failure to do so can result in death or
electrical shock.**



1. Remove the 1/4" hex head screw securing the ice maker assembly to the cabinet.



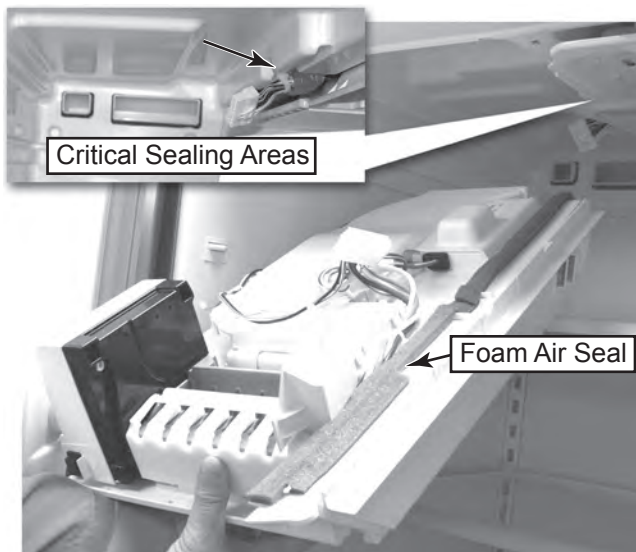
2. Pull the ice maker assembly out and down to remove.



3. Rest the assembly on the upper shelf

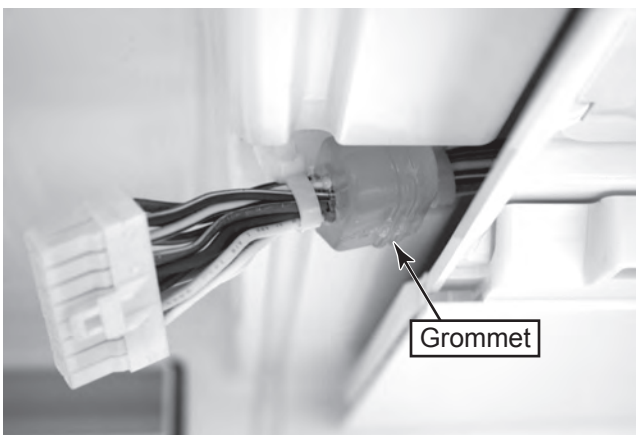
REMOVING THE ICE MAKER ASSEMBLY (continued)

4. Disconnect the wiring harness.



Top and side view of icemaker assembly.

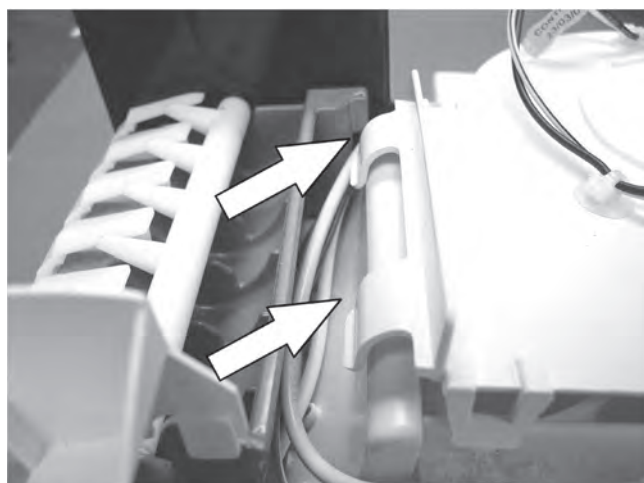
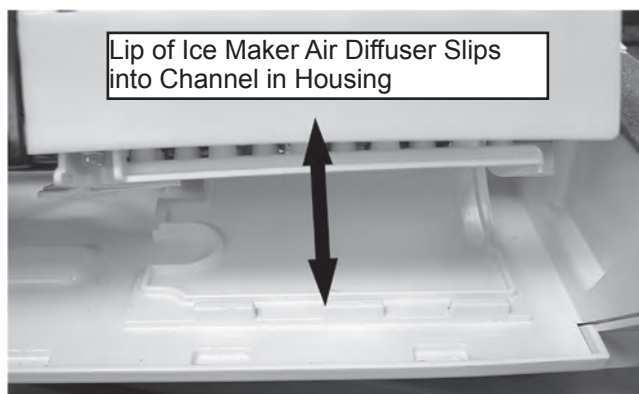
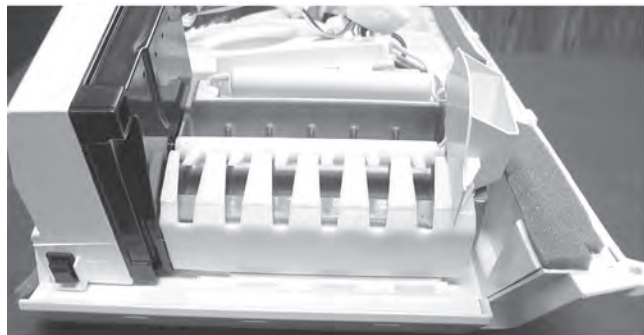
5. Slide out the assembly.



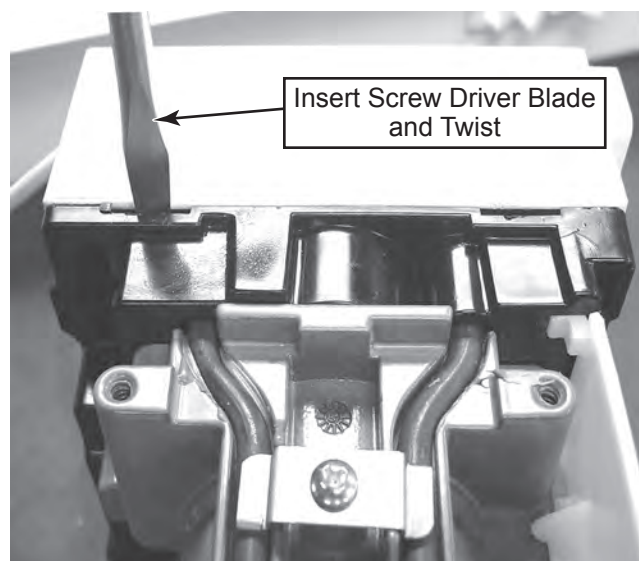
6. When reassembling, make sure the grommet is installed properly to ensure a tight air seal.

Continued next page.

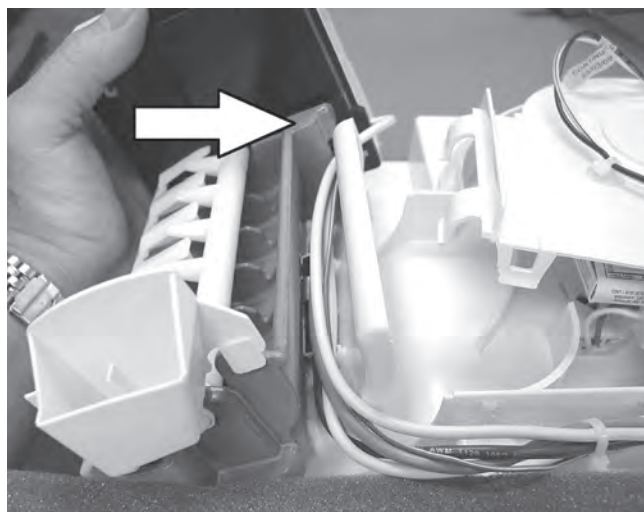
REMOVING THE ICE MAKER ASSEMBLY (continued)



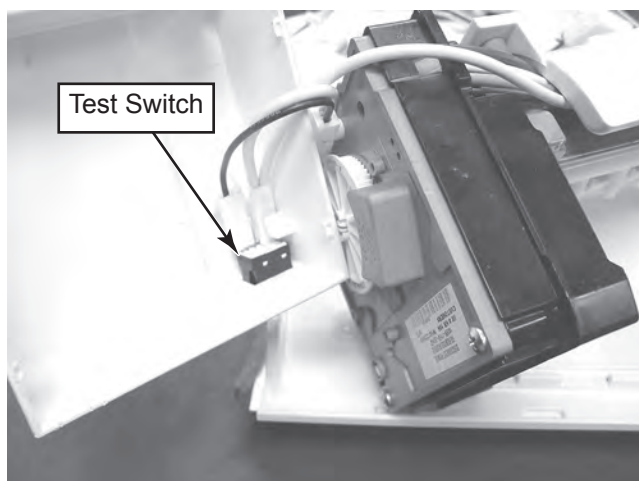
7. Unsnap fasteners securing fan cover and lift off.



9. Remove the icemaker cover.



8. Roll out the ice maker to disengage lip on air diverter from ice maker housing and remove



REMOVING HEAT SHIELD AND THERMAL FUSE

⚠ WARNING

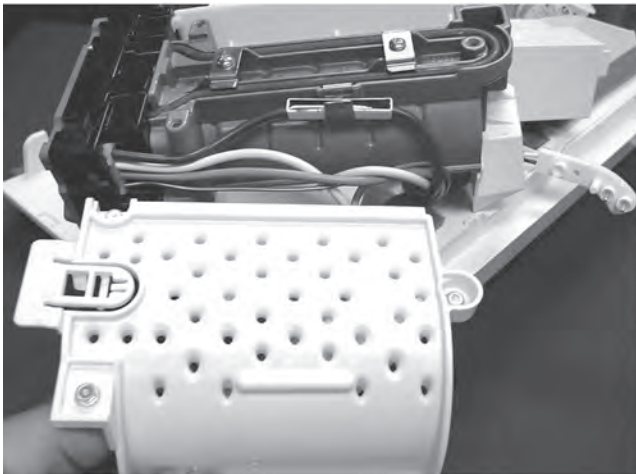


Electrical Shock Hazard

**Disconnect power before servicing.
Replace all parts and panels before
operating.**

**Failure to do so can result in death or
electrical shock.**

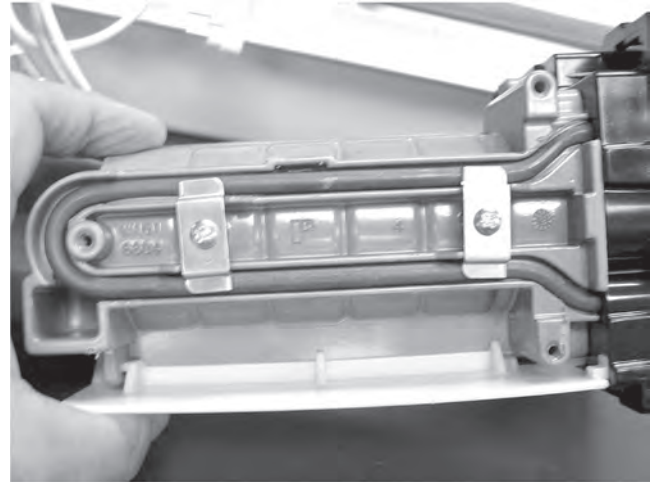
1. Unplug refrigerator or disconnect power.



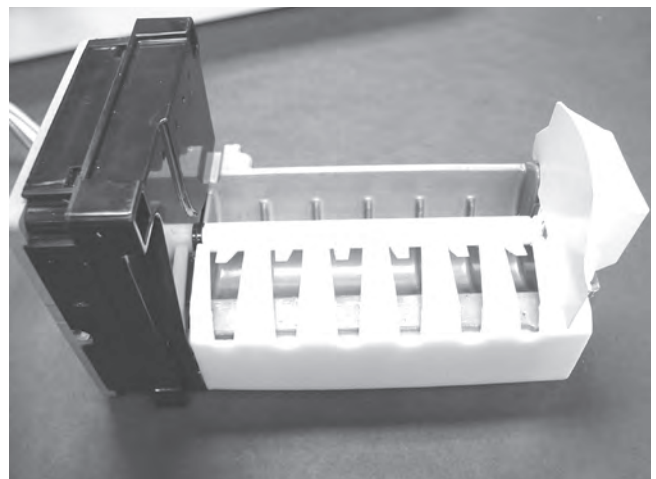
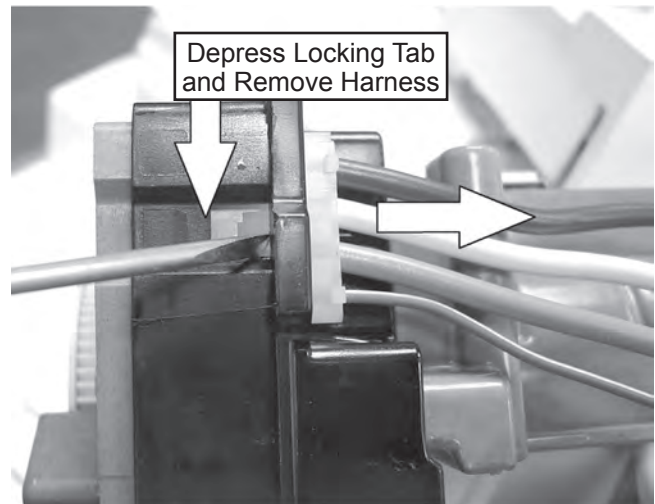
2. Remove 3 screws securing air diffuser to ice maker mold.



3. Unclip the thermal fuse from the ice maker mold.



View of the bottom of the new small cube ice maker.



6 cavity Small cube ice maker core.

REMOVING THE ICE MAKER LED

⚠ WARNING



Electrical Shock Hazard

**Disconnect power before servicing.
Replace all parts and panels before
operating.**

**Failure to do so can result in death or
electrical shock.**

1. Unplug refrigerator or disconnect power.



2. Insert straight blade screwdriver into slot in light lens to release tabs and lift out.



3. Insert straight blade and pop out assembly.



NOTE:

If the LED cannot be pulled out to unplug the wiring harness, the assembly must be split apart to remove.

ACCESSING THE WATER VALVE AND RESERVOIR

⚠ WARNING



Electrical Shock Hazard
Disconnect power before servicing.
Replace all parts and panels before
operating.
Failure to do so can result in death or
electrical shock.

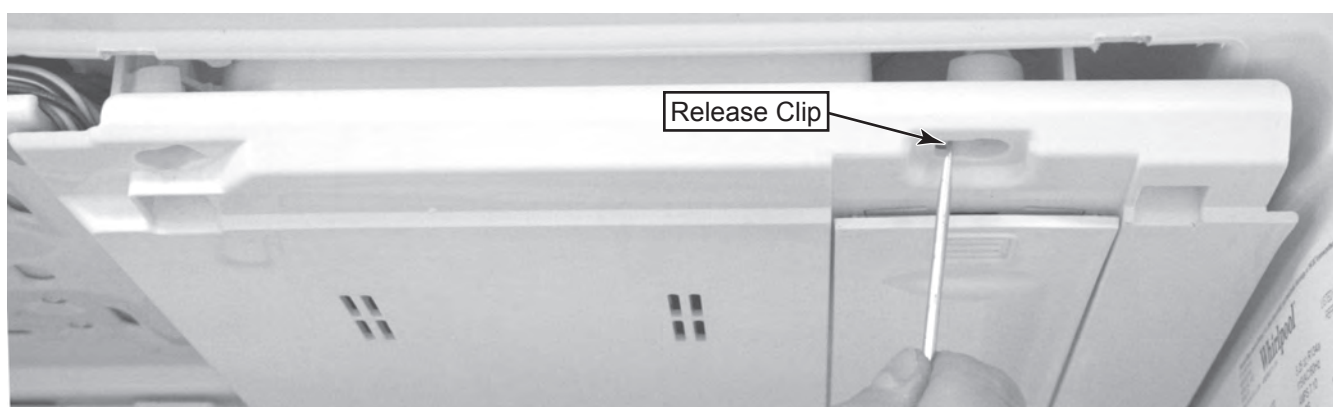
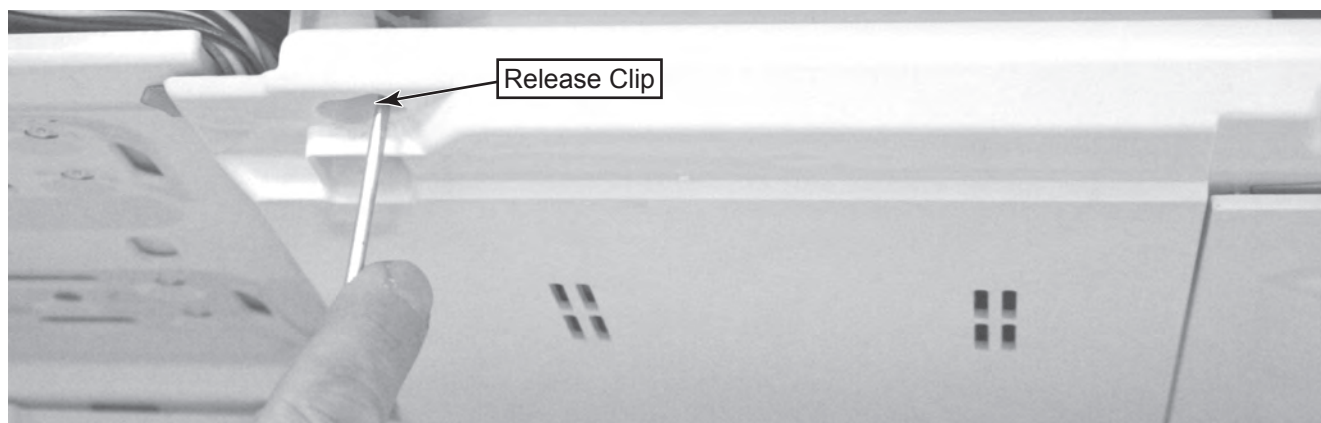


1. Remove 1/4" hex head screw on left and right side of cover.

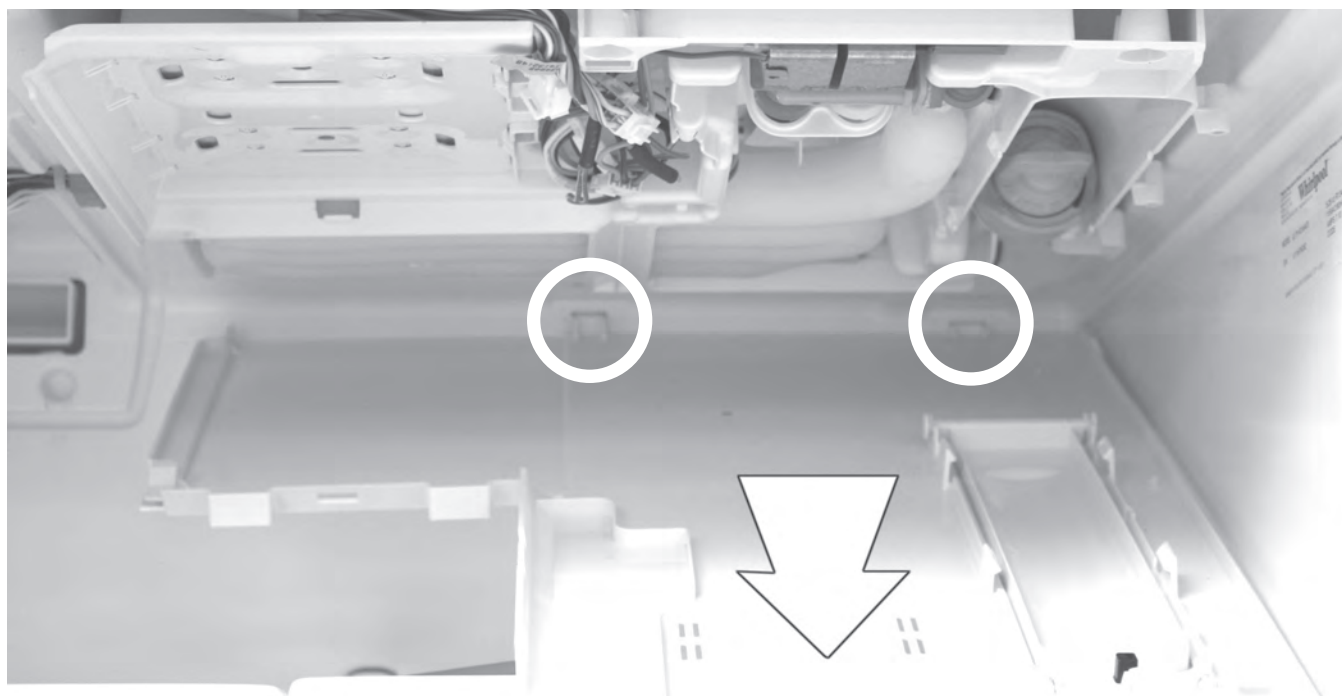


Continued next page.

ACCESSING WATER VALVE AND RESERVOIR (continued)



2. Release the clips on left and right side of the cover as it is pulled downward.



3. Drop the front of the cover and slide cover back. There are two tabs on the rear of the cover that fit into slots in the rear of the cavity..

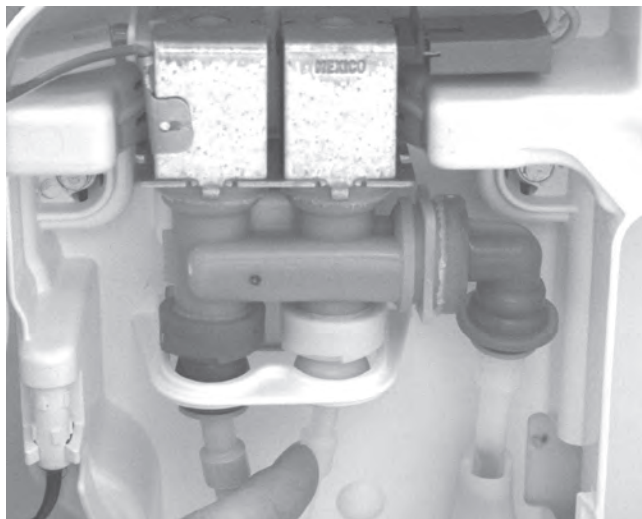
REMOVING THE WATER VALVE

⚠ WARNING

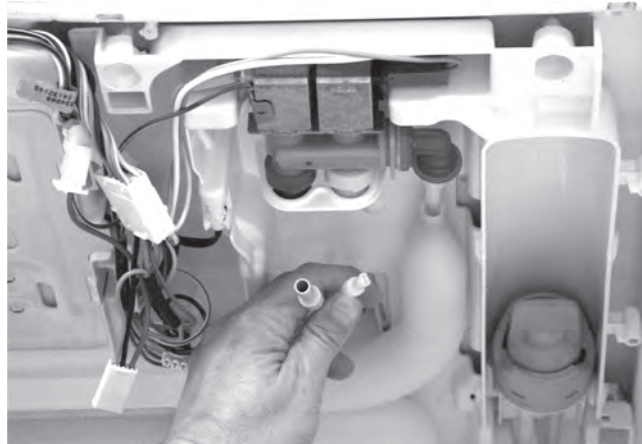


Electrical Shock Hazard
Disconnect power before servicing.
Replace all parts and panels before operating.
Failure to do so can result in death or electrical shock.

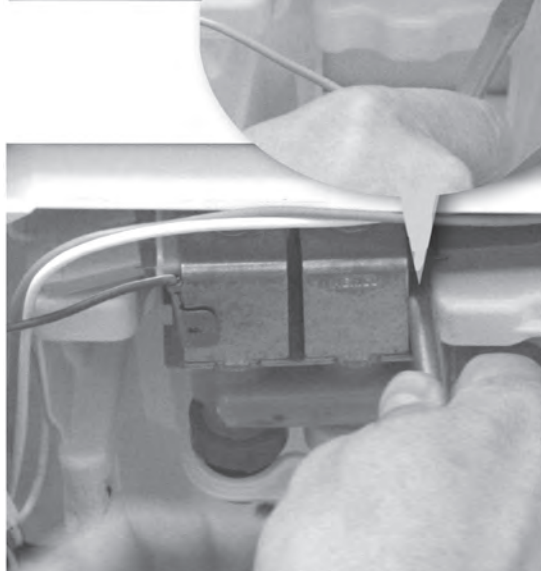
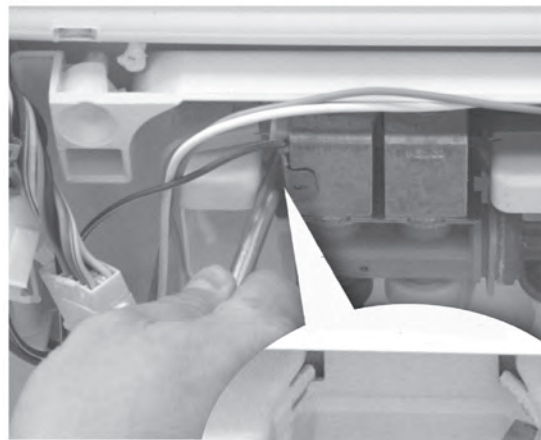
1. Unplug refrigerator or disconnect power.
2. Turn off the water supply to the refrigerator.



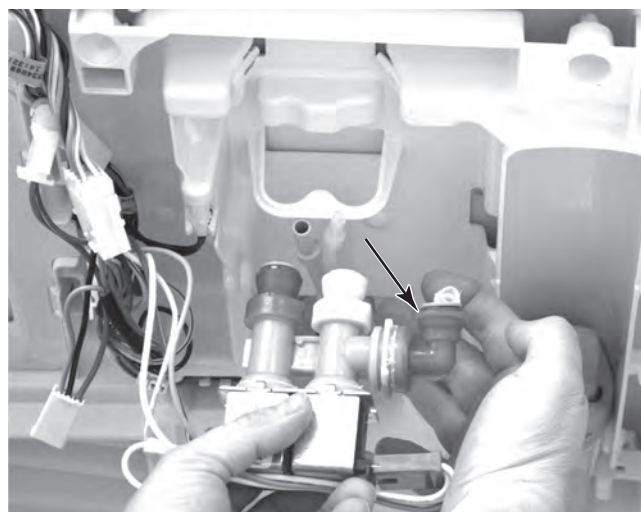
3. Remove the water tubes from the valve



4. Release the water tubes from the John Guest fittings and remove.



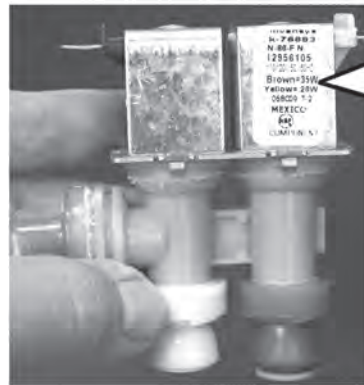
5. Release the retainer tabs on the left and right side of the valve as you pull down on the valve.



6. Drop the valve down and remove the inlet water tube.

REMOVING THE WATER VALVE (continued)

7. Disconnect harness and chassis ground connector .



invensys®
k-76883
N-88-F N
12956105
110/120V 50/60HZ
Brown=35W
Yellow= 20W
068C09 T-2
MEXICO

COMPONENT

REMOVING THE TEST SWITCH

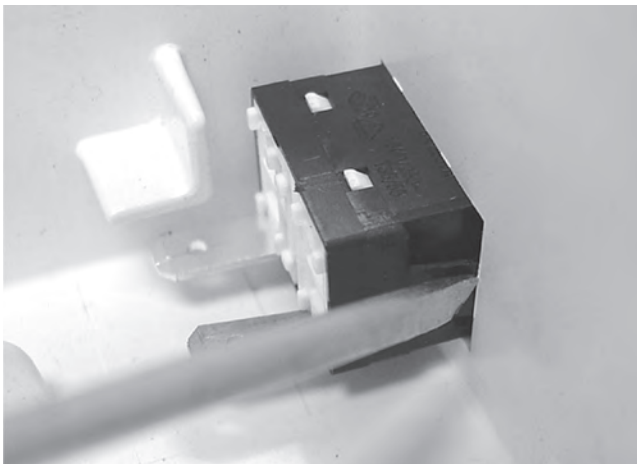
⚠ WARNING



Electrical Shock Hazard
Disconnect power before servicing.
Replace all parts and panels before operating.
Failure to do so can result in death or electrical shock.



1. Disconnect wires from switch.



2. Use a straight blade screw driver to release locking tab on the side of the switch.



3. Remove switch.

ACCESSING THE MOTORIZED AIR DAMPER

⚠ WARNING



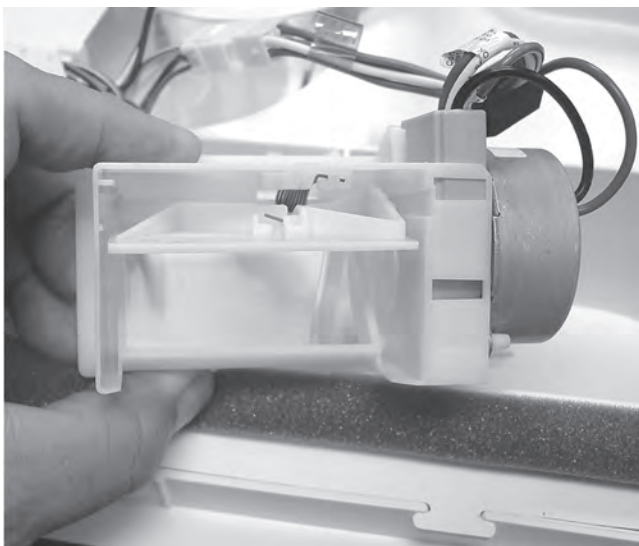
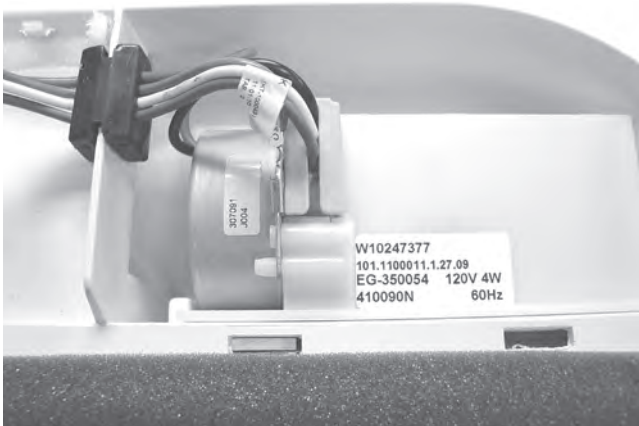
Electrical Shock Hazard

Disconnect power before servicing.

Replace all parts and panels before operating.

Failure to do so can result in death or electrical shock.

1. Unplug refrigerator or disconnect power.



View of damper door.



2. Lift motorized damper from the housing.



ACCESSING THE MACHINE COMPARTMENT

⚠ WARNING



Electrical Shock Hazard

Disconnect power before servicing.

Replace all parts and panels before operating.

Failure to do so can result in death or electrical shock.

1. Unplug refrigerator or disconnect power.
2. The Rear Cover Is Removed In Three Pieces



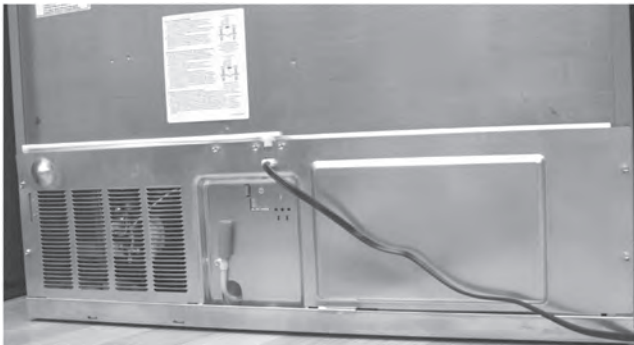
Compressor:

Wattage – 60HZ/113Watts

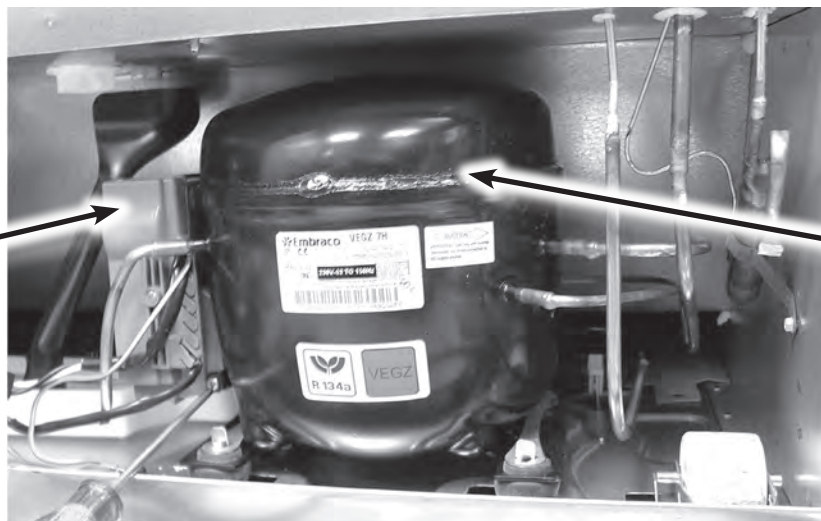
Locked Rotor – 3.3 amps

Full Load – 3.3 amps

Resistance all windings – 6.4 Ohms



Inverter
Voltages:
Red/White
120 VAC
ORG/Red
and ORG/
WH 3-6 VDC



Embraco variable
speed compressor

REMOVING THE COMPRESSOR

⚠ WARNING

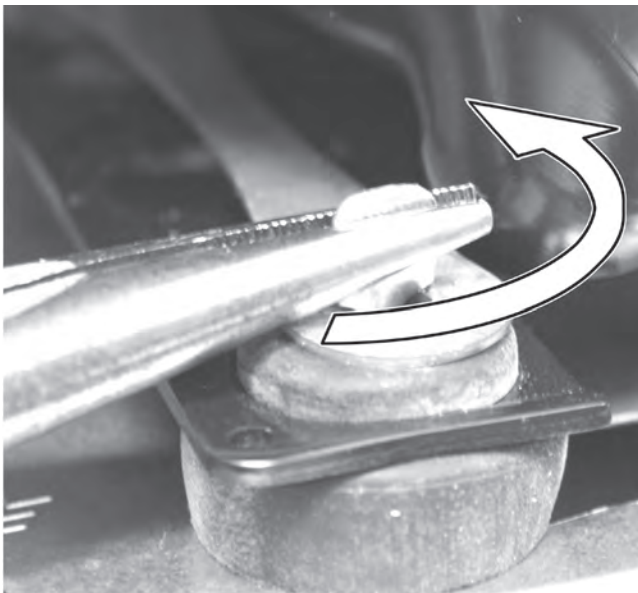


Electrical Shock Hazard

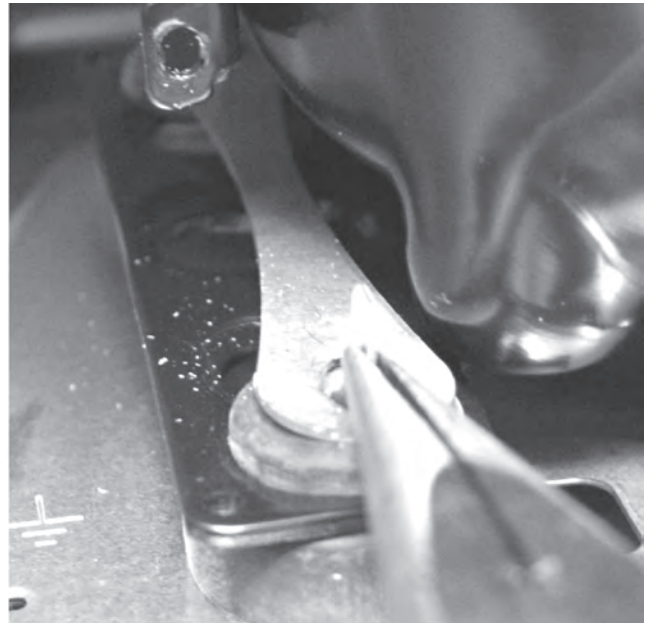
**Disconnect power before servicing.
Replace all parts and panels before
operating.**

**Failure to do so can result in death or
electrical shock.**

1. Unplug refrigerator or disconnect power.



2. Turn counterclockwise



3. Straighten locking tab



4. Lift off dog bone

ACCESSING THE ELECTRONIC BOARDS

⚠ WARNING



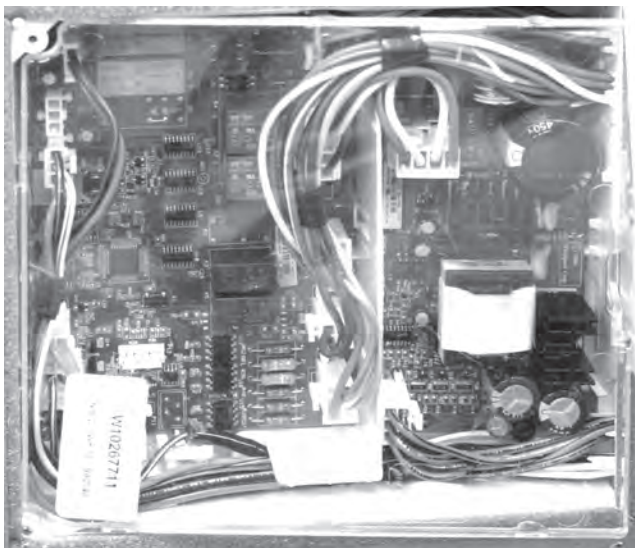
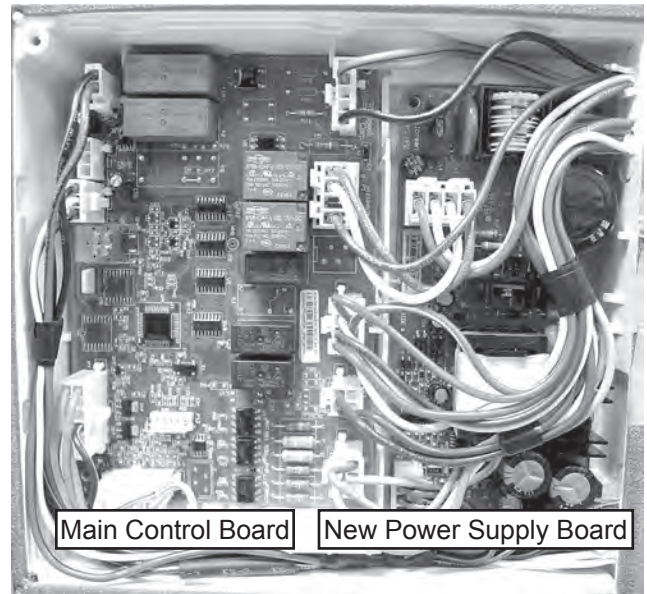
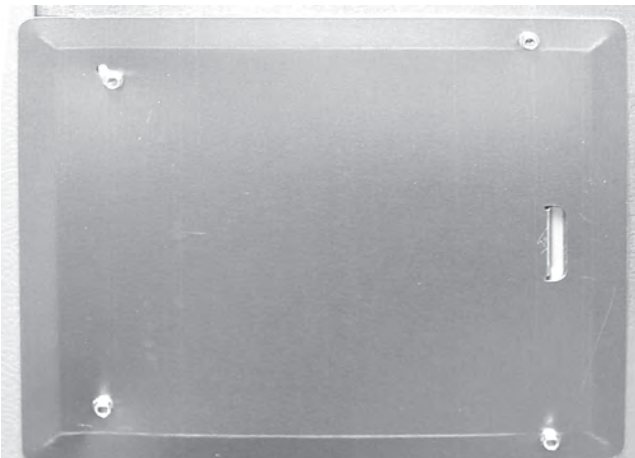
Electrical Shock Hazard

Disconnect power before servicing.

Replace all parts and panels before operating.

Failure to do so can result in death or electrical shock.

1. Unplug refrigerator or disconnect power.
2. Remove 4 screws securing cover.



3. Unsnap and remove plastic cover.

REMOVING THE DRAIN TUBE

⚠ WARNING



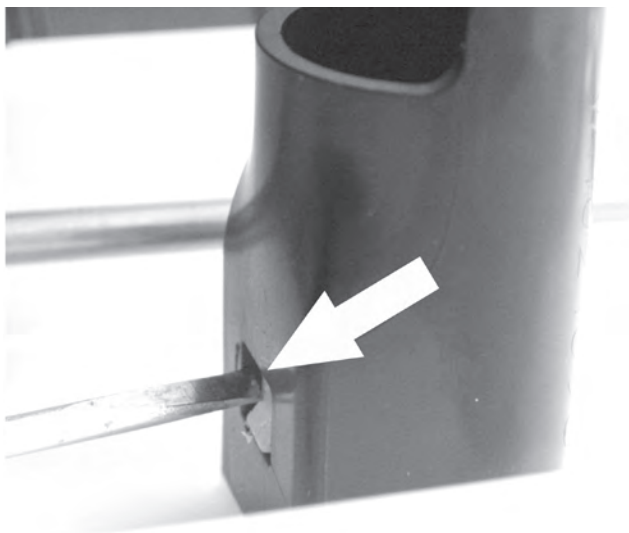
Electrical Shock Hazard

Disconnect power before servicing.

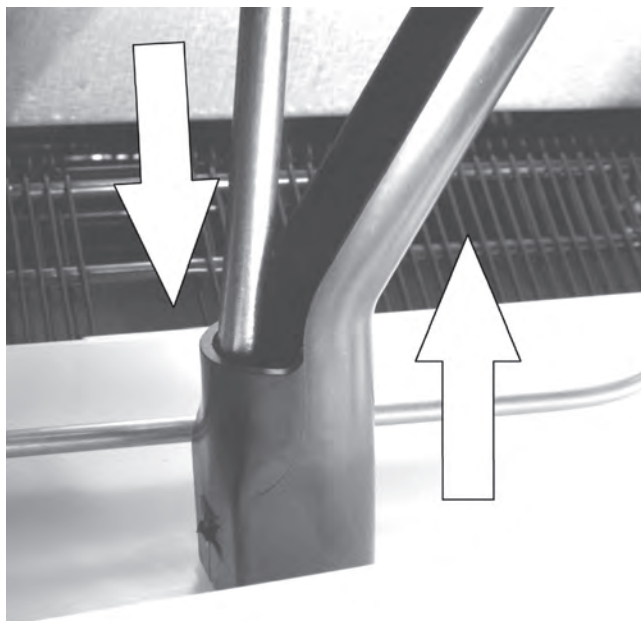
Replace all parts and panels before operating.

Failure to do so can result in death or electrical shock.

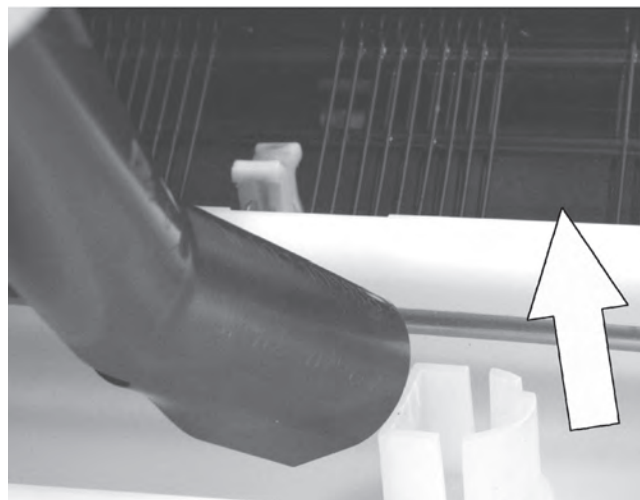
1. Unplug refrigerator or disconnect power.



2. A locking tab must be released to remove drain tube.

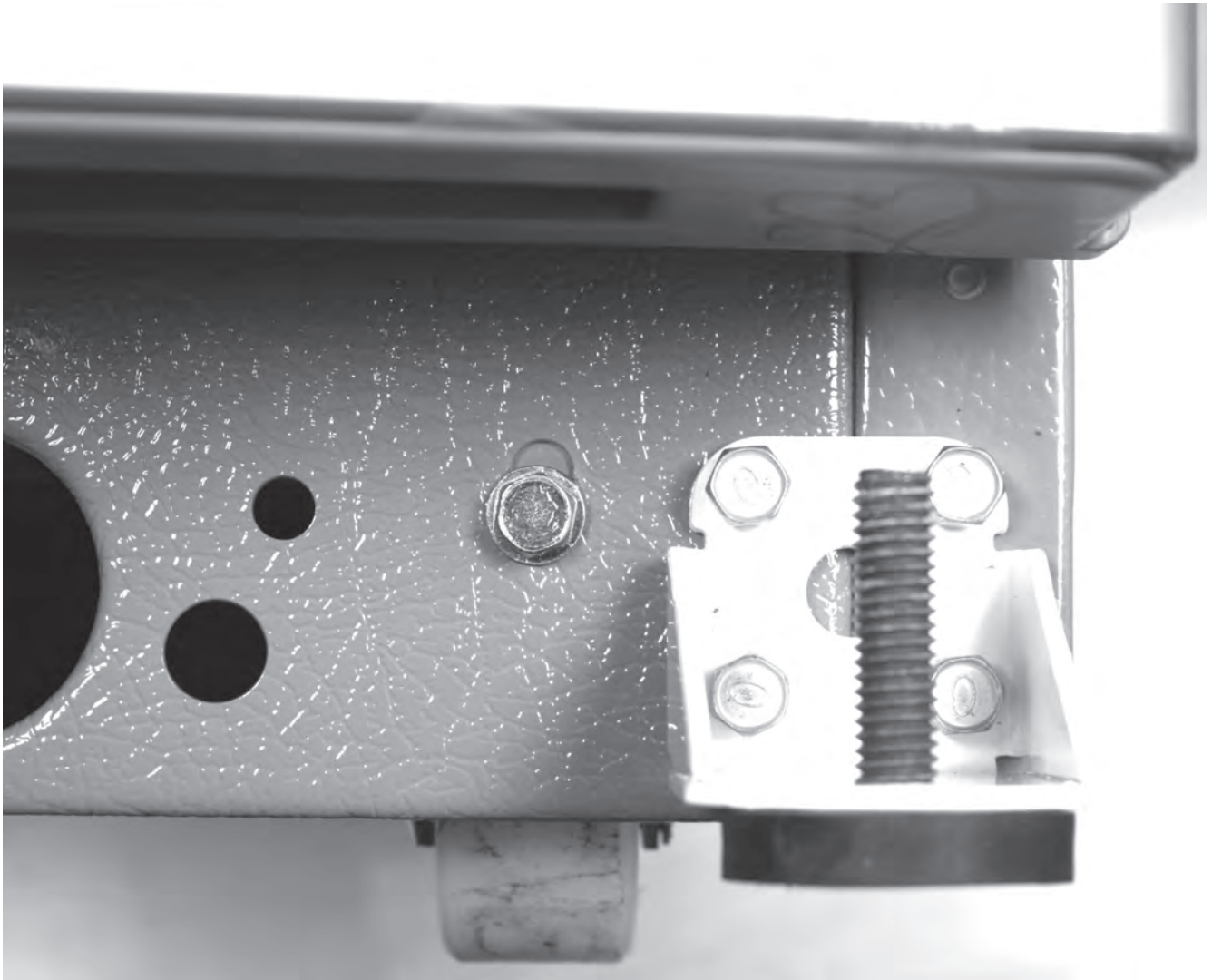


3. Insert a straight blade screwdriver vertically from the top of the drain tube opening to release locking tab.



4. Lift off drain tube.

LEVELING LEGS



Front roller adjustment 3/8" Hex Head Bolt Clockwise raises cabinet Counterclockwise lowers cabinet.

After leveling unit, adjust brake so rubber foot contacts floor.

DROPPING THE MACHINE COMPARTMENT PAN

⚠ WARNING



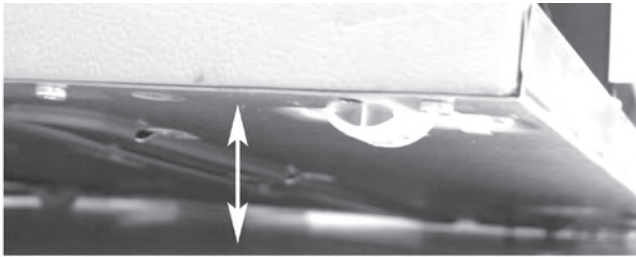
Electrical Shock Hazard

Disconnect power before servicing.

Replace all parts and panels before operating.

Failure to do so can result in death or electrical shock.

1. Unplug refrigerator or disconnect power.



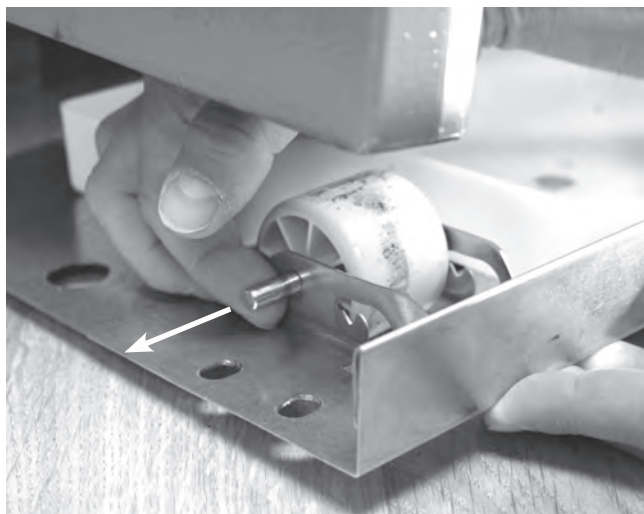
2. Tilt condenser fan side of cabinet



2. Remove the 2 Torx screws securing the base pan to the cabinet and drop the down the base pan



REMOVING LEFT ROLLER



1. Slide pin out of bracket and remove the roller.

REMOVING THE EVAPORATION PAN

⚠ WARNING



Electrical Shock Hazard

Disconnect power before servicing.

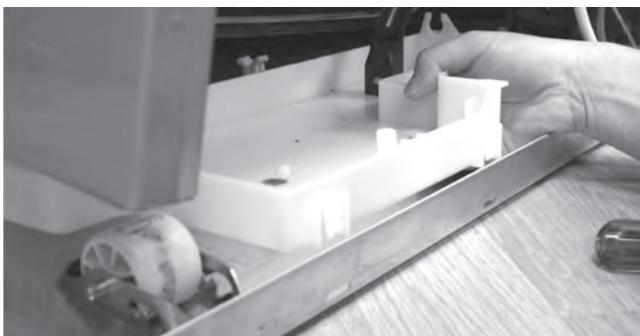
Replace all parts and panels before operating.

Failure to do so can result in death or electrical shock.

1. Unplug refrigerator or disconnect power.



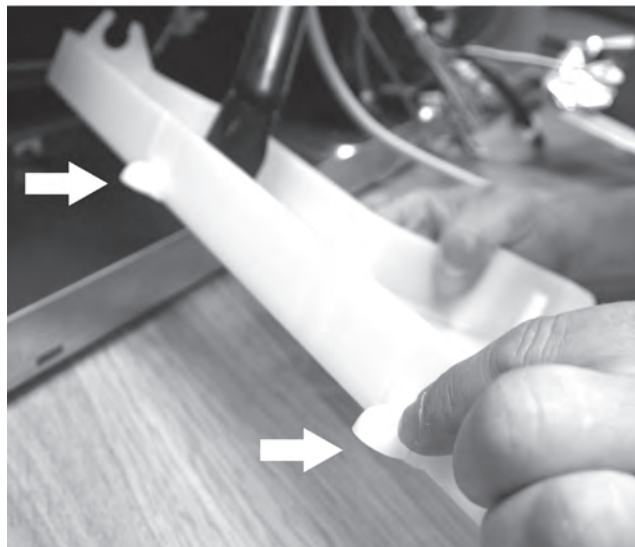
2. Lift the condenser line out of the evaporation pan bracket



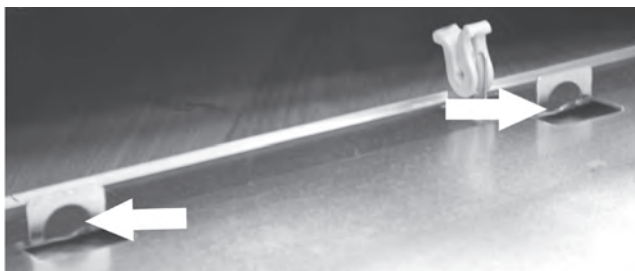
3. Release the 2 evaporation pan tabs inserted into the cabinet



4. Release the 2 evaporation pan tabs inserted into the cabinet



5. Tabs on the evaporation pan secure the front of the pan to the base.



REMOVING THE CONDENSER FAN ASSEMBLY

⚠ WARNING

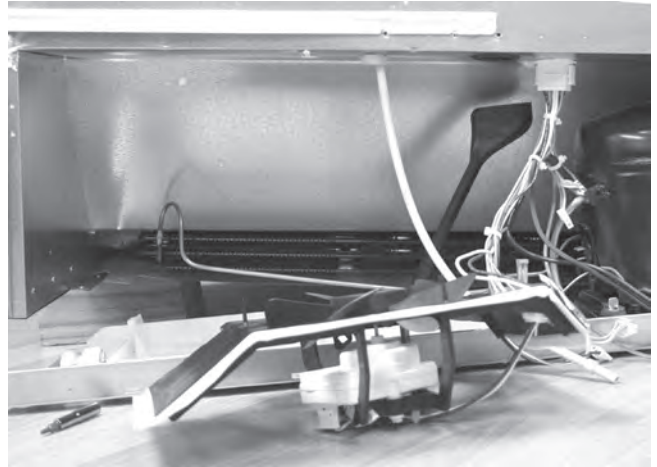
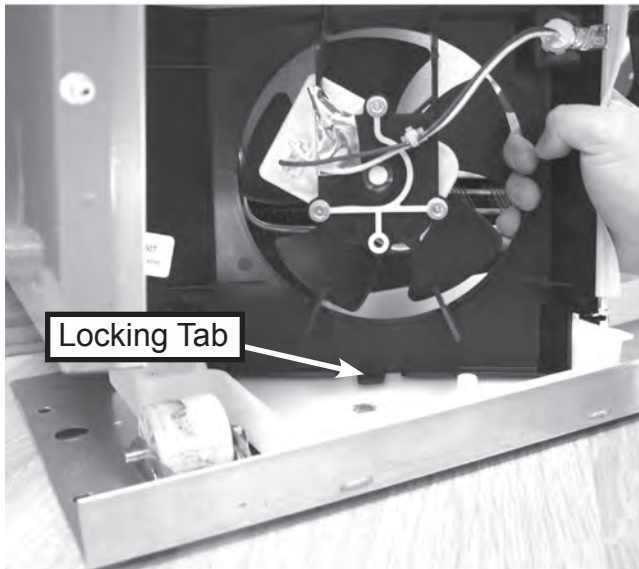


Electrical Shock Hazard

**Disconnect power before servicing.
Replace all parts and panels before
operating.**

**Failure to do so can result in death or
electrical shock.**

1. Unplug refrigerator or disconnect power.



2. Unsnap tab on the bottom of the fan assembly 2 and slide assembly channels out of evaporator pan.

DISASSEMBLING THE DISPENSER

⚠ WARNING



Electrical Shock Hazard

Disconnect power before servicing.

Replace all parts and panels before operating.

Failure to do so can result in death or electrical shock.

1. Unplug refrigerator or disconnect power.



2. Remove drip pan and tray.



DISASSEMBLING THE DISPENSER (continued)

Remove the User Interface Board



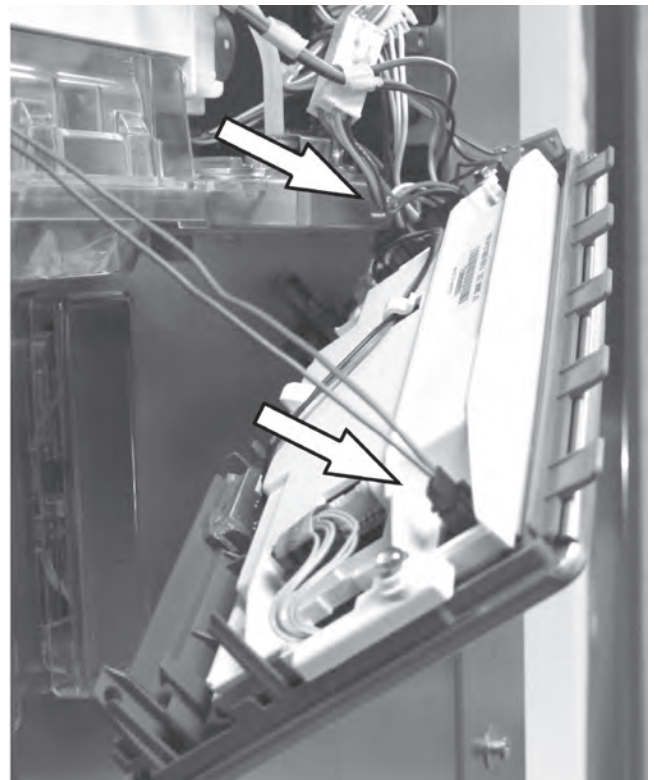
3. Remove the User Interface Board



5. Pull out on the bottom of the user interface board as you pull down. Tabs on the top of the user interface engage slots in the dispenser housing.



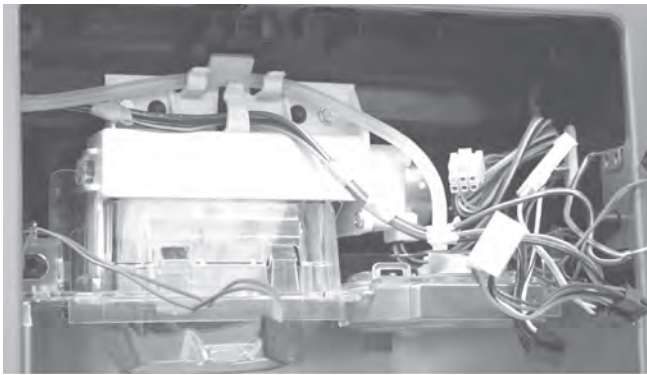
4. Release the clips on the left and right side on the bottom of the user interface board



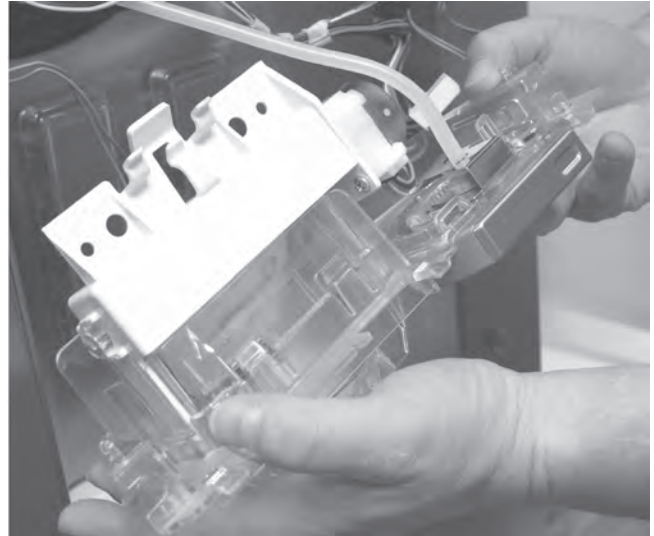
6. Disconnect wire harnesses.

Continued next page.

DISASSEMBLING THE DISPENSER (continued)



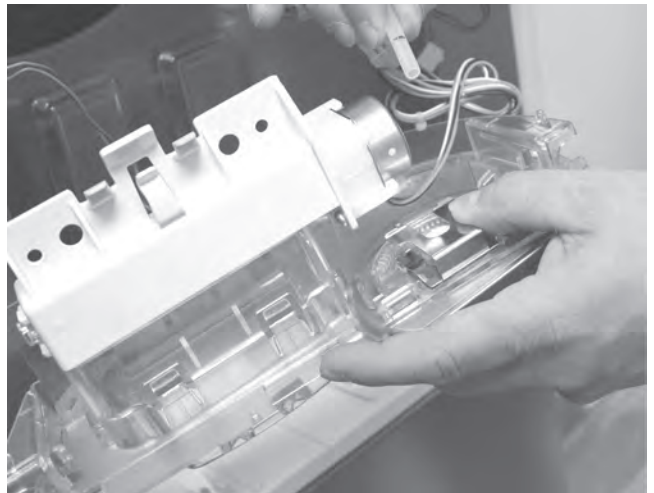
7. Unsnap water tube from divider.



10. Remove the divider.



8. Remove the two 1/4" hex head screws.



11. Disconnect the wiring harnesses.

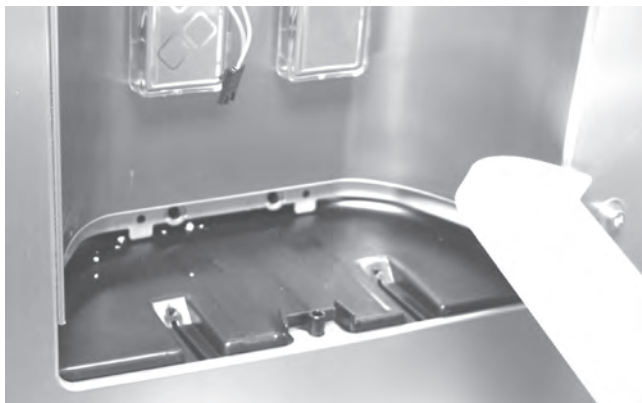


9. Release the clips on the left and right side of the dispenser divider.

DISASSEMBLING THE DISPENSER (continued)



12. Remove the two 1/4" hex head screws securing the lower pan to the housing.



13. Remove the pan.

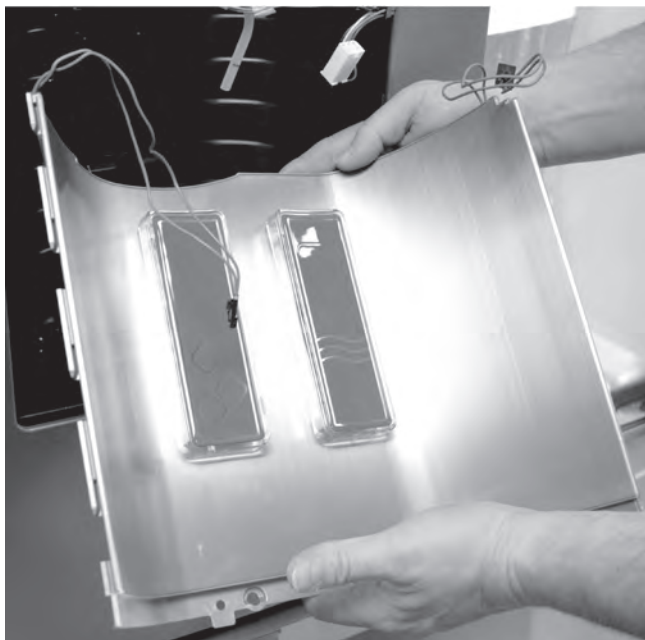


15. Disengage the facade tabs from the slots in the housing.



14. Depress the rear of the dispenser facade and lift.

DISASSEMBLING THE DISPENSER (continued)



16. Slide switches up to disengage from housing tabs.

ACCESSING THE DOOR HINGES AND WATER TUBES

⚠ WARNING



Electrical Shock Hazard
Disconnect power before servicing.
Replace all parts and panels before operating.
Failure to do so can result in death or electrical shock.

1. Unplug refrigerator or disconnect power.

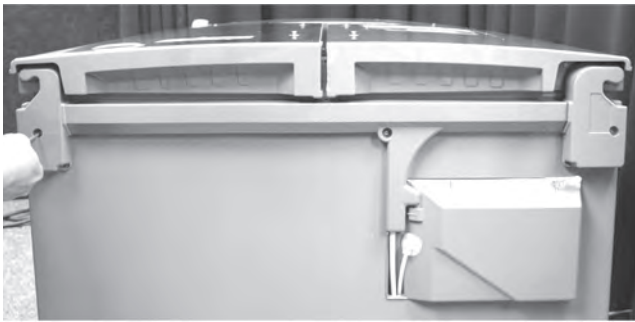


Figure 1



Figure 2

2. Remove the right and left hand hinge cover, see figures 1,2 and 3.



Figure 3

3. Remove the Phillips head screw securing the "T" shaped cover to the top of the cabinet, see figure 4.

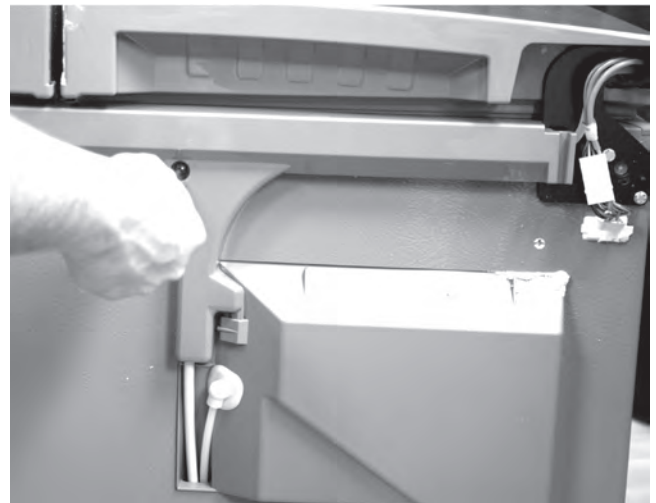


Figure 4

4. Remove the cover to expose the water tubes and wiring harness, see figure 5.

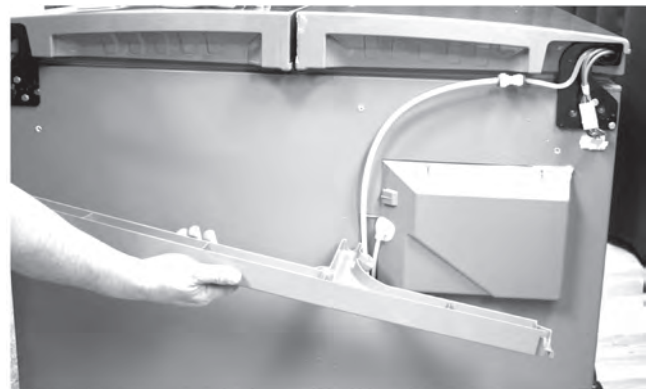


Figure 5

PREPARATION FOR LEFT DOOR REMOVAL

⚠ WARNING



Electrical Shock Hazard

**Disconnect power before servicing.
Replace all parts and panels before
operating.**

**Failure to do so can result in death or
electrical shock.**

1. Unplug refrigerator or disconnect power.
2. Disconnect John Guss Fitting, see figure 1.
3. Unplug Wire Harness, see figure 2.

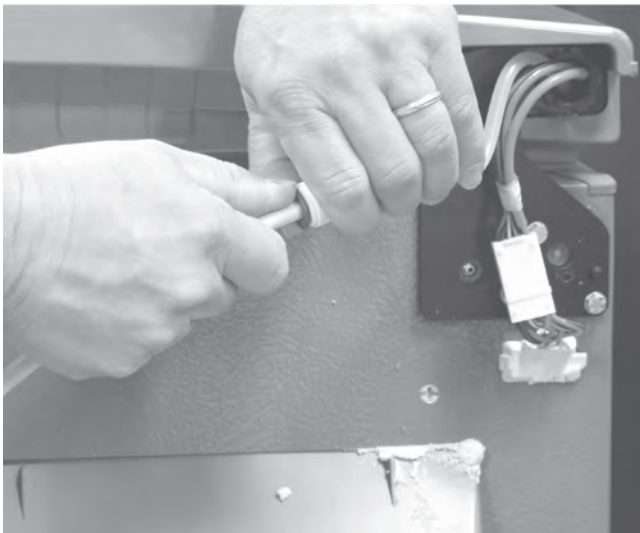


Figure 1



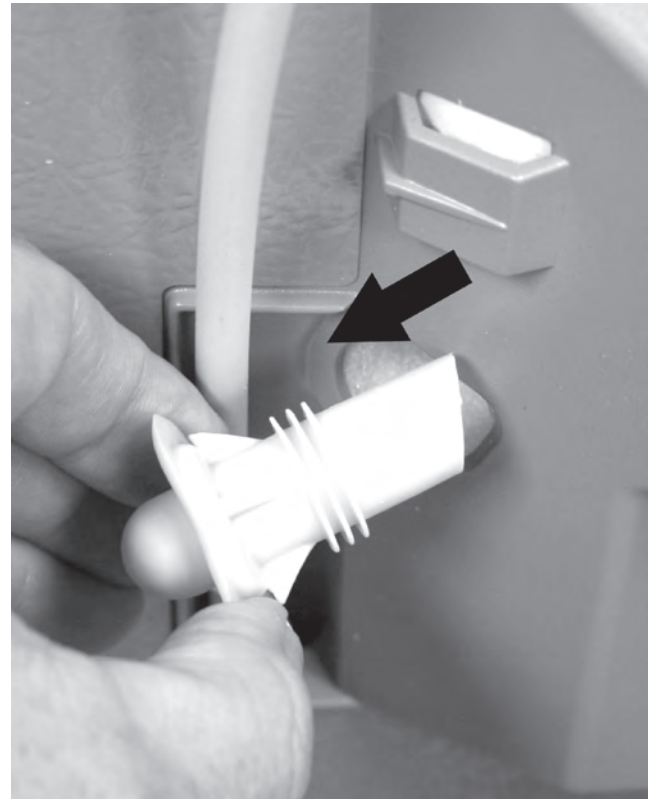
Figure 2

REMOVING THE ICEMAKER FILL TUBE

⚠ WARNING



Electrical Shock Hazard
Disconnect power before servicing.
Replace all parts and panels before operating.
Failure to do so can result in death or electrical shock.



– NOTES –

COMPONENT TESTING

FOR SERVICE TECHNICIAN'S USE ONLY

Tech Sheet

Do not discard

⚠ WARNING



Electrical Shock Hazard

Disconnect power before servicing.

Replace all parts and panels before operating.

Failure to do so can result in death or electrical shock.

No-Load Performance, Controls in Normal Position

	Kw/24 hr ± 0.4	Percent Run Time ± 10	Cycles/24 hr ± 10	Refrigerator Center Compartment Average Food Temperature $\pm 4^{\circ}\text{F}$	Freezer Compartment Average Food Temperature $\pm 5^{\circ}\text{F}$	Ice Maker Compartment Average Temperature $\pm 5^{\circ}\text{F}$
Ambient $^{\circ}\text{F}$	70° 90° 110°	70° 90° 110°	70° 90° 110°	70° 90° 110°	70° 90° 110°	70° 90° 110°
27 cu ft	1.2 1.7 3.0	70 80 90	14 14 10	38 38 38	0 0 0	15 15 15

Temperature Relationship Test Chart

	Evaporator Outlet $\pm 3^{\circ}\text{F}$	Evaporator Inlet $\pm 3^{\circ}\text{F}$	Suction Line $\pm 7^{\circ}\text{F}$	Average Total Wattage $\pm 10\%$	Suction Pressure ± 2 PSIG	Head Pressure ± 5 PSIG
Ambient $^{\circ}\text{F}$	70° 90°	70° 90°	70° 90°	70° 90°	70° 90°	70° 90°
27 cu ft	-4 -6	-4 -6	75 97	70-85 75-100	6.0 3.6	70 125

Component Specifications

Component	Specifications all parts 115VAC/60HZ unless noted
Compressor	VEGZ7H
	BTUH..... Variable
	Watt..... 60 Hz / 113 watts
	Current Lock rotor..... 3.3 amps± 15%
	Current Full load..... 3.3 amps± 15%
	Resistance Run windings..... 6.4 ohms± 15%
	Resistance Start windings..... 6.4 ohms± 15%
	Inverter..... 3-6 VDC, Red / White =120 VAC
Electric damper control	Maximum closing time..... 16 seconds
	Temperature Rating..... 20°F- 110°F
	RPM..... 4.2
Thermistor	Temperature..... Resistance
	77°F..... 2700 ohms± 1.8%
	36°F..... 7964 ohms± 1.0%
	0°F..... 23345 ohms± 1.8%
Condenser motor	Rotation (facing end opposite shaft)..... Clockwise
	RPM..... 1090 RPM
	Watt..... 3.4 watts±15%@115VAC
	Current..... 0.085 amps± 15%@115VAC
Evaporator fan motor	Rotation (facing end opposite shaft)..... Clockwise
	RPM..... 3000 RPM
	Watt..... 5.5 ±15% watts@12 VDC
	Note: Fan blade must be fully seated on shaft to achieve proper airflow.
Thermostat (Defrost)	Volt..... 120/240 VAC
	Watt..... 495 watts
	Current..... 5.8/3.75 amps
	Resistance across terminals: 56 K ohms
	Above 32°F ±5°..... Open
	Below 17°F ±7°..... Closed
Evaporator heater	Volt..... 115 VAC
	Wattage..... 470 ±5% watts @ 115VAC
	Resistance..... 29.0 ±5% ohms
Control board	Volt..... 120VAC, 60 HZ
Dual Water Valve	Watts..... Blue side 20w, Yellow side 20w
Smart Valve (Isolation)	Watts..... 20w
Ice Box Fan	Rotation (facing end opposite shaft)..... Clockwise
	RPM..... 3000 RPM
	Watt..... 5.5 ±15% watts@12 VDC
Light switch	Type..... SPST NC
	Volt..... 125/250 VAC
	Current..... 8/4 amps

DIAGNOSTICS & TROUBLESHOOTING

DIAGNOSTIC TESTS



Service Diagnostics Mode:

1. Activate the keypad by touching the screen.
2. Press and hold the Home Button. While holding Home Button press and hold the Temperature Button.

NOTE: If the Temp Button beeps, you must start procedure over.

3. Release the Home Button and the Temperature Button simultaneously.
4. On the service menu press service diagnostics .

NOTE: The Service Mode can be exited at any time by pressing the back key twice or if left unattended for 20 minutes.

1. Freezer Compartment Thermistor

Status 01Pass

2. Refrigerator Compartment Thermistor

Status 01Pass

3. Evaporator fan motor & air baffle motor

Status 02 fan ON / air baffle cycles open and close

4. Compressor Status / Speed

Press an option to change compressor status or speed

Status ON / MAX OFF / MIN

5. Defrost Heater / Bimetal

Status 01 Bimetal Closed

6. Defrost Mode

Press an option to change defrost mode - Adaptive defrost on 8 hour basic mode.

When switching options disregard exit mode for ADC

7. Button and Dispenser pad test

Touch any key or pad to test

8. Dispenser Lighting

Select ON or OFF to test dispenser lighting

9. Refrigerator compartment door switch

Status 02 door closed 01 door open

10. Freezer compartment door switch

Status 02 door closed 01 door open

11. Ice Door Motor

Place cup under ice chute, press ice dispenser to perform test

Status 01 door closed 02 door opening 03 door open 04 door closing

NOTE: Prolonged time delay

DIAGNOSTIC TESTS (continued)

12. Water Filter Gallon Usage

Status Gallons used since reset

13. Water Filter Usage Rating

Status 199

14. Water Filter Time Usage

Status Days since reset

15. Water Filter Time Rating

Status add days after 182

16. Water Dispense Fill Test

Place cup under spigot press pad to initiate test

17. Water Dispenser Fill Test

Status Valve OFF / ON

18. Ice Maker Fill Test

Make sure Ice Maker mold is empty before performing test

Remove icemaker front cover to press icemaker test switch

Status Ice Maker fill OFF. Wait for icemaker unit to cycle

19. Ice Level Sensor

Make sure the bin is present and not full before performing test

Status 02 Bin not full and present

20. Ice Bin Thermistor

Status 01 Pass

21. Ambient Thermistor

Status 01 Pass

22. Humidity Sensor

Status 01 Shows actual humidity reading

23. Ice Box Fan Motor & Ice Box Air Baffle Motor

Status 02 Fan ON/air baffle closed - ON/OFF delayed cycle

24. Mullion Heater

Status ON / OFF to control heater - test ON/OFF

25. Mullion Heater Mode

Press an option to change Mullion Heater Mode Sensor operation

Status ON / OFF OFF = heater ON 100% of the time

26. Forced Defrost Mode

Press an option to change Forced Defrost Mode

No Forced Defrost / Short Defrost / Long Defrost

27. Exit

The Service Mode can be exited at any time by pressing the back key twice

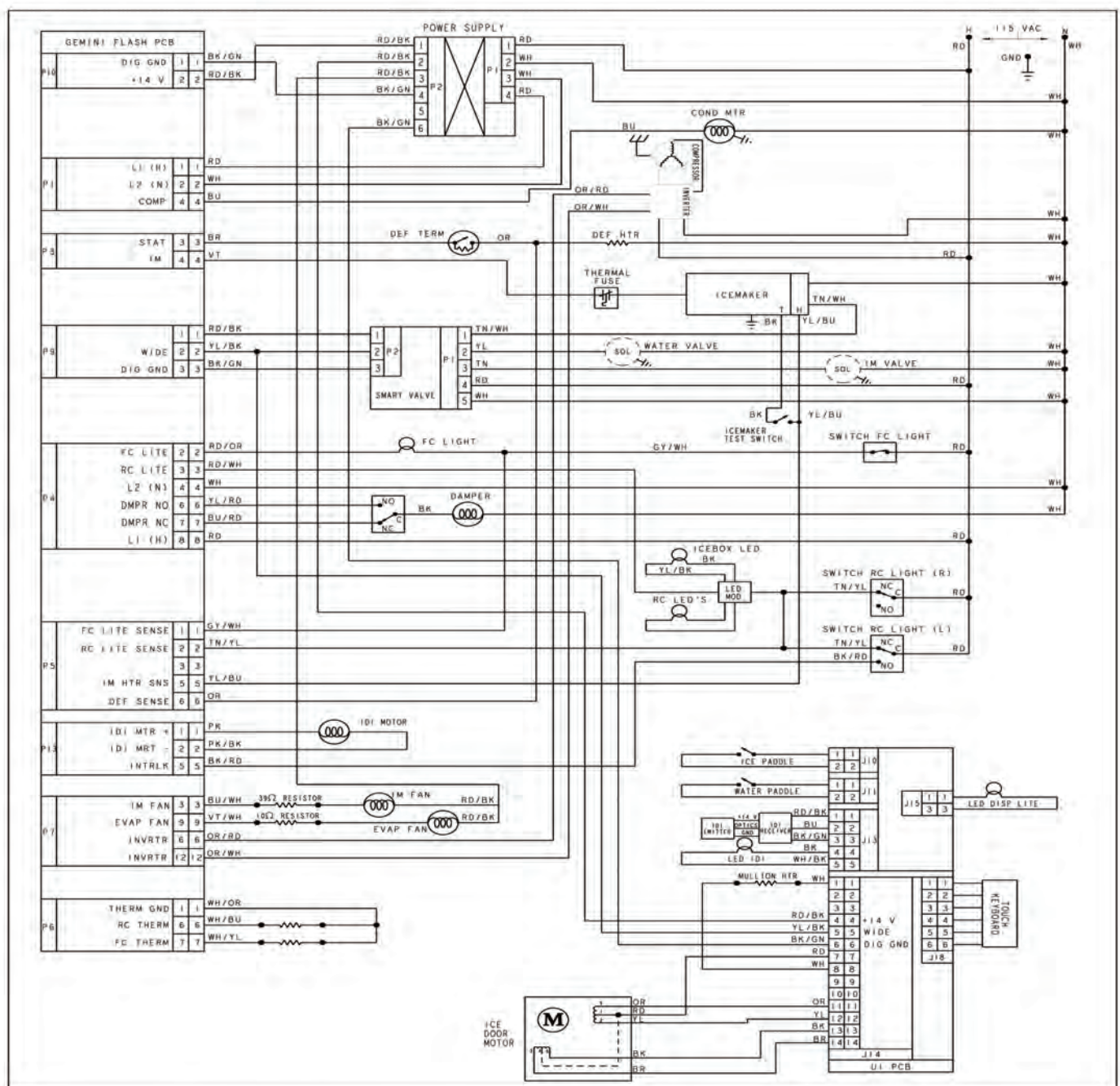
NOTE: When Service Mode is entered, all main control board loads: defrost heater, compressor, fans, ice maker, etc. are turned off. Only the load being checked during a diagnostic step is energized.

Exceptions:

The Ice bin light illuminates anytime an RC door is open. (10 minute maximum if door is left open)

The Mullion Heater circuit remains energized (at a rate of 0%, 30%, 70% or 100% of its power dependent on previous setting). The Mullion Heater remains on until diagnostic step 25 (Mullion Heater step), where the technician can turn on/off for testing. Once the Service Mode is exited, the Mullion Heater goes back to the last state previous to entering into Service Mode.

WIRING DIAGRAMS



Voltage Test Points										
Power Supply			Main Control							
	From	To								
P1	P1-1	P1-2	115 VAC							
	P1-3	P1-4								
P2	P2-1	P2-4	14 VDC							
	P2-2	P2-6								
P1	P1-1	P1-2	115 VAC							
	P1-2	P1-4								
P3	P3-3	P1-2	115 VAC							
	P4-2	P1-2								
	P4-2	P4-8								
	P4-3	P4-8								
P4	P4-4	P4-8	115 VAC							
	P4-6	P4-4								
	P4-7	P4-4								
	P5-1	P1-1								
P5	P5-2	P1-1	115 VAC							
	P5-5	P1-1								
	P5-6	P1-1								
P6	P6-7	P6-1	14 VDC							
	P7-3	P10-2								
P7	P7-6	P7-12	14 VDC							
	P7-9	P10-2								
P8	P8-2	Communication								
	P9-1	P9-3		14 VDC						
P9	P9-2	Communication								
	P10-1	P10-2		14 VDC						
P10	P11-3	P13-2	115 VDC							
	P13-5	P1-2		115 VAC						
P13	P1-1	P1-5								
	P1-2	P1-5		115 VAC						
	P1-3	P1-5								
	P1-4	P1-5								
P2	P2-1	P2-3	14 VDC							
	P2-2	Communication								

*Compressor start is off

**RC left door closed

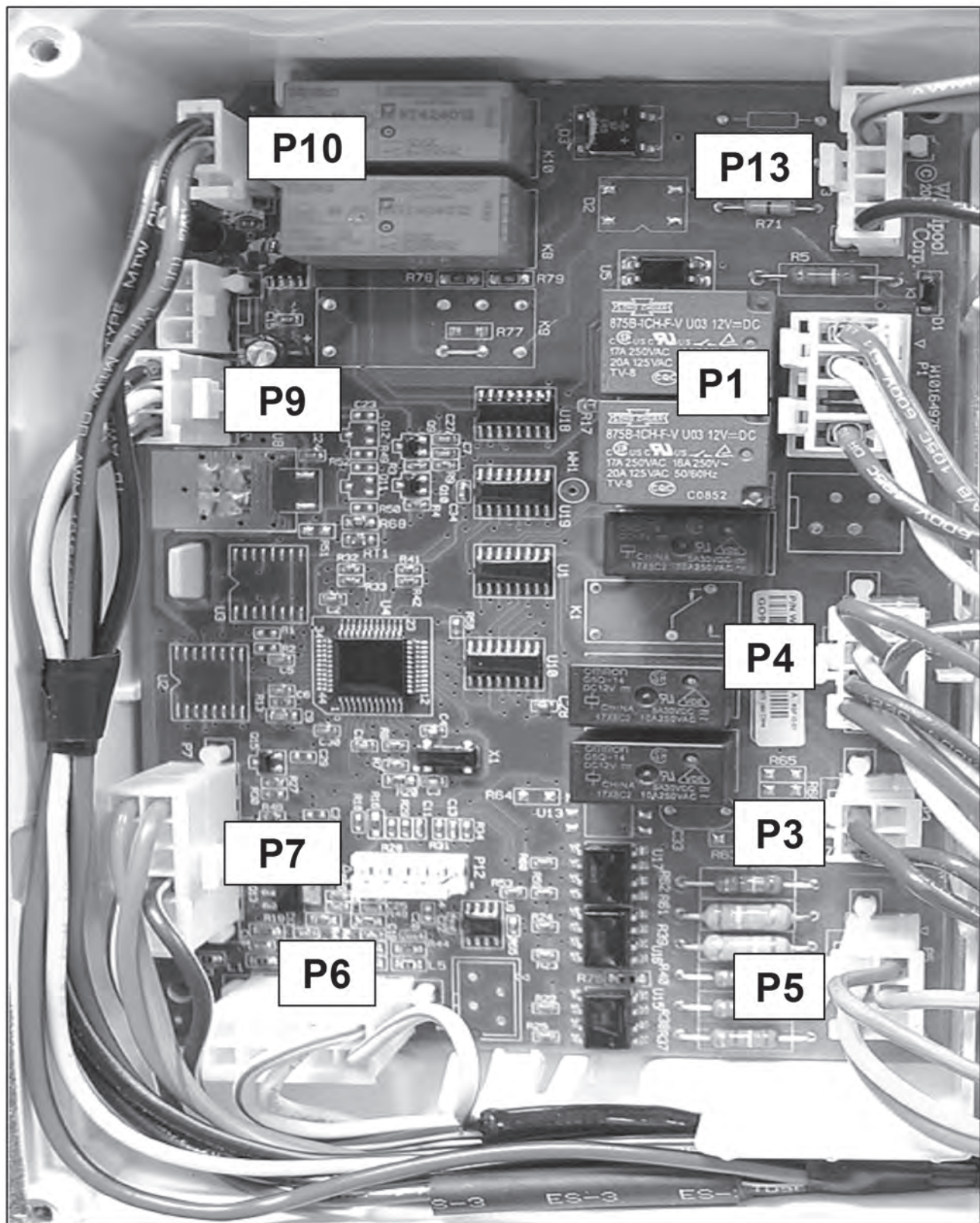
†Compressor calling for water

‡Dispenser calling for water

Voltage Test Points

Rev A

MAIN CONTROL BOARD CONNECTOR IDENTIFICATION



PRODUCT SPECIFICATIONS AND WARRANTY INFORMATION SOURCES

IN THE UNITED STATES:

FOR PRODUCT SPECIFICATIONS AND WARRANTY INFORMATION CALL:

FOR WHIRLPOOL PRODUCTS: 1-800-253-1301

FOR KITCHENAID PRODUCTS: 1-800-422-1230

FOR ROPER PRODUCTS: 1-800-447-6737

FOR TECHNICAL ASSISTANCE WHILE AT THE CUSTOMER'S HOME CALL:

THE TECHNICAL ASSISTANCE LINE: 1-800-253-2870

**HAVE YOUR STORE NUMBER READY TO IDENTIFY YOU AS AN
AUTHORIZED SERVICER**

FOR LITERATURE ORDERS:

PHONE: 1-800-851-4605

FOR TECHNICAL INFORMATION AND SERVICE POINTERS:

www.servicematters.com

IN CANADA:

FOR PRODUCT SPECIFICATIONS AND WARRANTY INFORMATION CALL:

1-800-461-5681

FOR TECHNICAL ASSISTANCE WHILE AT THE CUSTOMER'S HOME CALL:

THE TECHNICAL ASSISTANCE LINE: 1-800-488-4791

**HAVE YOUR STORE NUMBER READY TO IDENTIFY YOU AS AN
AUTHORIZED SERVICER**

